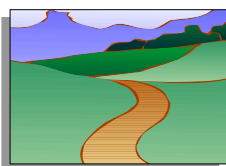


REVISED DRAFT  
ENVIRONMENTAL IMPACT REPORT

**1837½ El Camino de la Luz Residence**  
**SCH No. 2005041031**

February, 2012



**Rodriguez Consulting, Inc.**  
**Environmental Review and Planning Services**

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**1837½ El Camino de la Luz Residence**

**Revised Draft**

**Environmental Impact Report**

SCH No. 2005041031

*Prepared For*

City of Santa Barbara

Planning Division

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Santa Barbara, California 93101

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Rodriguez Consulting, Inc.

Santa Barbara, California

February, 2012

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# CITY OF SANTA BARBARA

## 1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT

### REVISED DRAFT ENVIRONMENTAL IMPACT REPORT

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- Appendix B: 2009 Geological Inspection Trench Report
- Appendix C: 2011 Slope Stability Report
- Appendix D: 2008 Proposed Final EIR Comments and Responses
- Appendix E: Mitigation Monitoring and Reporting Plan
- Appendix F: URBEMIS Worksheets

## **1.0 INTRODUCTION**

This document is a Revised Environmental Impact Report (EIR) and has been prepared to evaluate the potential for the 1837½ El Camino de la Luz Residence project to result in significant impacts to the environment. This EIR has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA). **Additional information regarding why a Revised Draft EIR has been prepared for the proposed project is provided in Section 1.4 below.**

### **1.1 PROJECT OVERVIEW**

The project site is located at 1837½ El Camino de la Luz, Santa Barbara, California. The site is within the West Mesa neighborhood in the southern portion of the City (Figure 1.1-1).

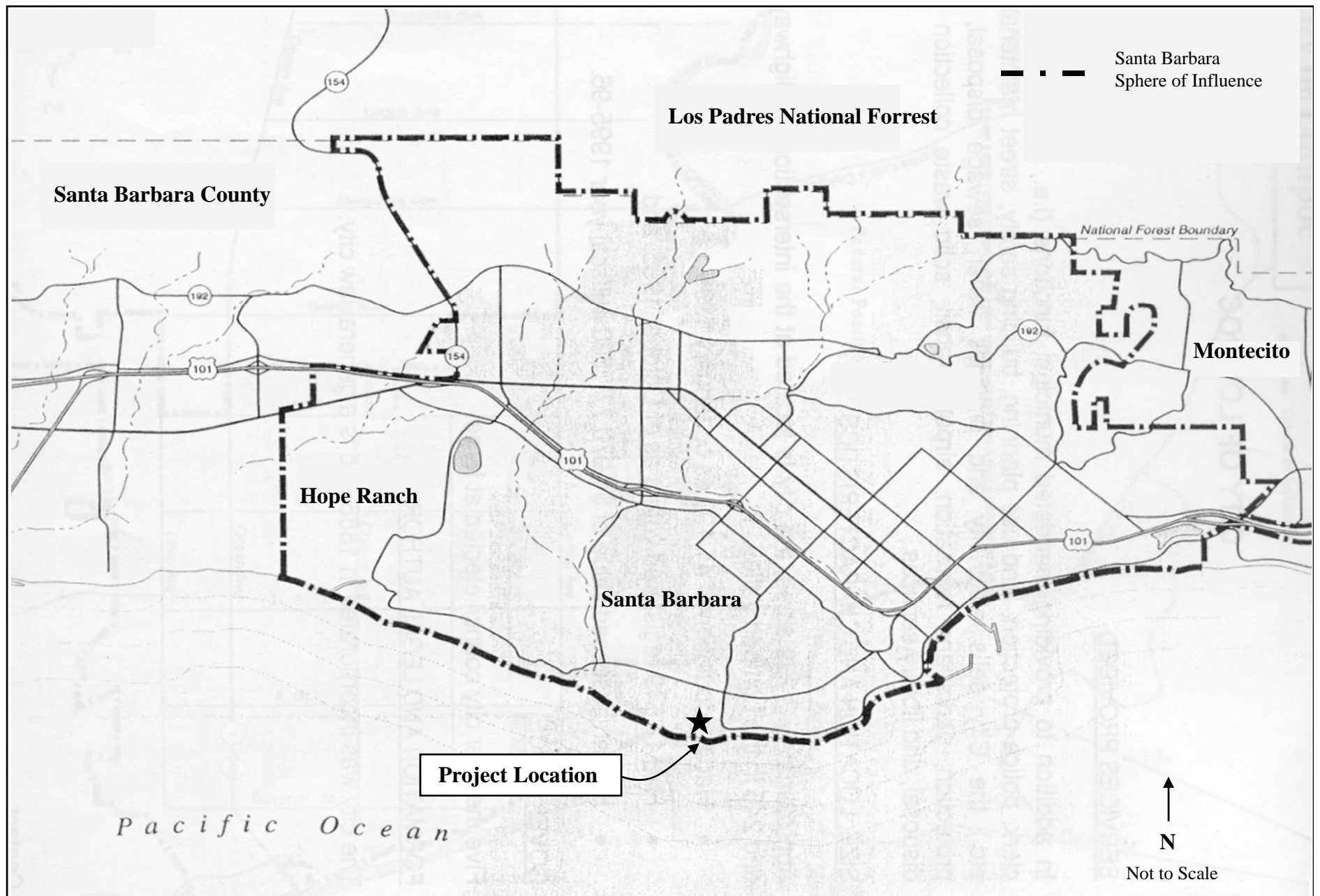
The proposed project is a request to construct a new 2-story single-family residence that would provide 1,499 square feet of livable floor area. The project site is a vacant 23,885 square foot bluff-top lot located north of and adjacent to the Pacific Ocean, south of La Mesa Park, and west of Lighthouse Creek. Access to the project site would be provided along private easements extending south from the terminus of El Camino de la Luz, which is a public street. Due to the project site's location adjacent to La Mesa Park, concerns have been expressed by the public regarding the potential for the proposed residence to adversely effect views of the ocean that are provided from the park and surrounding areas. Additional concerns regarding the stability of the project site ocean bluff have also been a concern to residents near the project site.

Discretionary approvals required for the proposed project include a Coastal Development Permit and a Modification to allow construction of the project on an existing lot that does not provide the required 60 feet of frontage along a public street. In addition to the required discretionary approvals, the proposed project will also require review and approval by the Single Family Design Board.

### **1.2 PURPOSE AND LEGAL AUTHORITY FOR THIS DOCUMENT**

The proposed project requires discretionary approvals by the City, and is therefore subject to the environmental review requirements of the California Environmental Quality Act (CEQA).

In accordance with section 15121(a) of the *CEQA Guidelines*, the purpose of an EIR is to serve as an information document that “...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project...” This EIR has been prepared as a “Project EIR” pursuant to section 15161 of the *CEQA Guidelines*. This section states that “...this type of EIR should focus on the changes in the environment that would result from the development.



**City of Santa Barbara**

*1837½ El Camino de la Luz*

**Figure 1.1-1**  
Regional Location

*The EIR shall examine all aspects of the project, including planning, construction and operation.”*

Impacts evaluated by this EIR were identified as being potentially significant environmental impacts by the Revised Initial Study prepared for the project. *CEQA Guidelines* section 15143 indicates that “*an EIR shall focus on the significant effects on the environment. The significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding in the Initial Study.*”

The *CEQA Guidelines* also provide guidance regarding the standards of adequacy for an EIR. Section 15151 of the *Guidelines* states: *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and good faith effort at full disclosure.*”

### **1.3 SCOPE AND CONTENT OF THIS EIR**

**Impact Evaluation.** After circulating a Draft Negative Declaration for the 1837½ El Camino de la Luz Residence project, the Planning Commission determined that an EIR would be required to evaluate project-related aesthetic impacts. Following this determination, the Santa Barbara Planning Division prepared a Revised Initial Study (August 31, 2005) for the proposed project. The 2005 Revised Initial Study is provided in Appendix A of this EIR.

The Revised Initial Study concluded that the project would have the potential to result in significant aesthetic impacts, resulting primarily from the potential for project-related changes to existing views of the Pacific Ocean that are provided from La Mesa Park and surrounding areas. This EIR also includes a project-specific level of detail assessment of potential aesthetic impacts that could result from the development of two alternative design concepts on the project site. Since the development of an alternative project design on the bluff-top project site would have the potential to result in significant geologic impacts, this EIR also evaluates the potential for the project and the design alternatives to result in significant geologic hazard impacts.

**Alternatives Analysis.** The Alternatives section of this EIR (Section 8.0) has been prepared in accordance with the requirements of section 15126.6 of the *CEQA Guidelines* and focuses on alternatives capable of eliminating or reducing significant adverse environmental effects associated with the project while feasibly attaining most of



the objectives of the project. The alternatives to the proposed project that were assessed in this EIR include:

- **No Project.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.
- **Alternative Design Concept No. 1.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project with a similar amount of building area as the proposed project.
- **Alternative Design Concept No. 2.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project design that is smaller than the proposed project.

#### **1.4 PREPARATION OF A REVISED DRAFT EIR**

The original Draft EIR prepared for the 1837½ El Camino de la Luz residence project was circulated for public review in November 2006. Responses to comments submitted on the Draft EIR were prepared and on June 5, 2008 the Planning Commission held a public hearing to consider a Proposed Final EIR and to also consider taking final action on the proposed project. At the hearing the Planning Commission requested that additional geological investigations be conducted for the project consistent with the requirements of a proposed EIR mitigation measure. This mitigation measure was included in the Draft and Proposed Final EIRs and required that additional geological investigations be conducted to determine if a previously reported bedding plane fracture actually existed on the project site. Additional studies of the project site were recommended by the EIR because a bedding plane fracture, if it actually existed, could have the potential to result in a significant slope stability impact. The proposed mitigation measure described the types of investigations to be conducted, and required that additional slope stability analysis be provided if it was determined that the bedding plane fracture existed on the project site and had the potential to result in a significant slope stability impact. The mitigation measure also required that if necessary, the proposed project be revised to ensure that it did not result in a significant slope stability impact.

In response to the request by the Planning Commission, additional geological investigations required by the mitigation measure were completed in 2009, and an additional slope stability analysis was completed in 2011. The 2009 investigation determined that the previously reported bedding plane fracture does not exist on the project site. The 2011 slope stability analysis evaluated several potential slope failure mechanisms that could have the potential to affect the project site, and determined that the proposed project would not result in a significant slope stability impact. The 2009 and 2011 site investigation and slope stability evaluation reports are provided in Appendices B and C of this Revised EIR, and information provided by the reports is summarized in EIR Section 5.2 (Geology).

The additional geological studies prepared for the 1837½ El Camino de la Luz project did not identify any significant impacts not previously described by the Draft and Proposed Final EIRs. However, the information provided by the geological studies is considered to be significant new information and a Revised Draft EIR has been prepared as required by CEQA Guidelines Section 15088.5. The Revised Draft EIR has been recirculated in its entirety to allow the public an opportunity to review and comment on the additional information regarding geologic conditions at the project site.

This Revised Draft EIR also includes other minor revisions to the previously prepared Draft and Proposed Final EIRs, including the addition of a project-related climate change impact analysis (revised Section 7.2), and updates to the analysis of cumulative aesthetic and geologic impacts (Sections 5.1.4 and 5.2.4, respectively). In addition, the Revised Draft EIR has been amended to omit the requirements of the previously proposed mitigation measure (former measure GEO-3a) that required additional geological studies of the project site because the requirements of that mitigation measure have been completed. For information purposes, comments submitted on the original Draft EIR and responses to those comments that were provided in the 2008 Proposed Final EIR are included in Appendix D of this Revised Draft EIR.

## **1.5 LEAD AGENCY**

The 1837½ El Camino de la Luz Residence project requires permit approvals by the Santa Barbara Planning Commission, and review by the Architectural Board of Review, City Public Works Department, and the Community Development Department Building and Safety Division. The City of Santa Barbara Community Development Department, Planning Division, is the Lead Agency responsible for the completion of this EIR and the environmental review of the proposed project. The California Department of Fish and Game will require the issuance of a Streambed Alteration Agreement for the proposed new stormwater discharge that would be located within the channel of Lighthouse Creek. The Regional Water Quality Control Board may also require a permit/permit waiver for proposed stormwater discharges to Lighthouse Creek.

## **1.6 ENVIRONMENTAL IMPACT REPORT PROCESS**

The procedural requirements for the preparation, review and adoption of an EIR are outlined below.

1. **Notice of Preparation (NOP).** After determining that an EIR is required for a project, the Lead Agency files a NOP soliciting input on the EIR scope to "Responsible," "Trustee," and any involved federal agencies. The NOP is also distributed to the State Clearinghouse if one or more state agencies is a responsible or trustee agency, and to parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP is posted in the County Clerk's office for 30 days. A scoping

- meeting to solicit public input on the issues to be assessed in the EIR is required under City CEQA Guidelines. For the project, the NOP was circulated for agency and public review and comment from August 31 to October 3, 2006. The Santa Barbara Planning Commission conducted a public environmental scoping hearing on June 16, 2005. A copy of the NOP and the written comments that were submitted are provided in Appendix A.
2. **Draft Environmental Impact Report (DEIR).** The DEIR must provide the following information:
    - Table of Contents
    - Summary
    - Project Description
    - Environmental Setting
    - Significant Environmental Impacts (direct; indirect; cumulative; growth-inducing; and unavoidable impacts)
    - Mitigation Measures
    - Alternatives to the proposed project
  3. **Public Notice and Review.** A Lead Agency prepares a Public Notice of Availability of an EIR. The Notice is placed in the County Clerk's office for a minimum of 30 days (Public Resources Code Section 21092). The Lead Agency sends a copy of its Notice to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of DEIR availability is given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. A 45-day public review period has been provided for the 1837½ El Camino de la Luz Residence project.
  4. **Notice of Completion.** A Lead Agency files a Notice of Completion with the State Clearinghouse after it completes a DEIR.
  5. **Final EIR (FEIR).** A FEIR must provide the following information:
    - The DEIR
    - Copies of comments received during the public review of the DEIR
    - A list of persons and entities commenting on the DEIR
    - Responses to comments received on the DEIR
  6. **Certification of FEIR.** The Lead Agency certifies that: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the Lead Agency; and c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project (*CEQA Guidelines* Section 15090).

7. **Lead Agency Project Decision.** A Lead Agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the Lead or Responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision that the significant impacts are acceptable in this case due to the overriding benefits of the project.
9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a monitoring or reporting program that verifies the implementation of the mitigation measures that were adopted or made conditions of project approval to mitigate significant effects. A copy of the proposed Mitigation Monitoring and Reporting Program is provided in Appendix E of this EIR.
10. **Notice of Determination.** A local agency files a Notice of Determination with the County Clerk after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). The Notice is posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).



## **2.0 SUMMARY**

### **2.1 PROJECT LOCATION**

The proposed project site is located at 1837½ El Camino de la Luz, Santa Barbara, California. The site is within the West Mesa neighborhood in the southern portion of the City. The project site is identified as Assessor's Parcel 045-100-065.

### **2.2 PROJECT DESCRIPTION**

The proposed project is a proposal to construct a 1,499 square foot (livable area), two-story single family residence with an attached 443 square foot garage on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.

The proposed development would require approval of the following discretionary applications:

1. A Coastal Development Permit to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.44.060); and
2. A Modification to allow construction of the new residence on a lot without the required 60-foot frontage on a public street (SBMC §28.15.080); and
3. Single Family Design Board approval (SBMC §22.69).

### **2.3 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

A Revised Initial Study (2005) was prepared for the El Camino de la Luz residence project to evaluate the potential for the project to result in significant environmental impacts (see Appendix A). The Revised Initial Study determined that the proposed project would have the potential to result in significant adverse aesthetic impacts. Based on that determination, an EIR was required for the proposed project.

The Revised Initial Study determined that the El Camino de la Luz residence project would have the potential to result in significant adverse impacts related to the following environmental issue areas:

- Biological Resources
- Hazards
- Transportation (access)

- Water Resources (water quality)

It was also determined that with the implementation of proposed mitigation measures, the identified impacts would be reduced to a less than significant level. Therefore, no further analysis of the identified issue areas was required by the EIR.

The evaluation of potential aesthetic impacts provided by this EIR also includes a project-specific level of detail assessment of alternative design concepts for the development of a single-family residence on the project site. Since the development of an alternative project design on the bluff-top project site would have the potential to result in significant geologic impacts, this EIR also evaluates the potential for the project and the design alternatives to result in significant geologic hazard impacts. A summary table listing the identified impacts and proposed aesthetic and geologic hazard impact mitigation measures that would be applicable to the proposed project and design alternatives is provided in Section 8.0 (Alternatives) of this EIR. Table 2.3-1 provides a summary of mitigation measures identified by this EIR and the Revised Initial Study (2005) to reduce identified aesthetic, geologic hazard, and other environmental impacts of the proposed project to a less than significant level.

### **2.3.1 Significant Unavoidable Impacts (Class I)**

The proposed project would not result in any significant and unavoidable environmental impacts.

### **2.3.2 Impacts That Can be Reduced to a Less Than Significant Level (Class II)**

The Revised Initial Study and Revised EIR prepared for the El Camino de la Luz residence project identified short- and long-term impacts related to biological resources, hazards, transportation and water resources that would result from the proposed project, but could be reduced to a less than significant level with the implementation of proposed mitigation measures. The proposed mitigation measures are summarized on Table 2.3-1.

For each significant impact identified by Initial Study and EIR, the Lead Agency must make findings required by section 15091 of the *CEQA Guidelines*. Based on substantial evidence, the Lead Agency must determine that either:

1. The project has been changed to avoid or substantially reduce the magnitude of the identified impacts;
2. Changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or,

3. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR.

### **2.3.3 Less Than Significant Impacts (Class III)**

The Revised Initial Study prepared for the El Camino de la Luz Residence project determined that the air quality, cultural resources, noise, public services, transportation (construction traffic), and water resources (drainage system maintenance) impacts of the project would not be significant, but provided recommended mitigation measures to reduce the project's impacts regarding those issue areas to the extent feasible. The Revised Initial Study also concluded that the project would have less than significant population and housing, and recreation impacts and no mitigation for those issue areas was required.

## **2.4 ALTERNATIVES**

The EIR evaluated the following alternatives to the proposed project.

- **No Project.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.
- **Alternative Design Concept No. 1.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project with a similar amount of building area as the proposed project.
- **Alternative Design Concept No. 2.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project design that is smaller than the proposed project.

Alternative Design Concept No. 2 was determined to be the environmentally superior alternative that would at least partially implement the applicant's objectives for the proposed residence project. This alternative would have the least effect on existing ocean views as seen from important view locations in the project area, and visual impacts of this alternative could be reduced to a less than significant level by making relatively minor changes to the alternative design concept evaluated by the EIR. Slope stability impacts that would result if this alternative design concept were to be implemented would be similar to the impacts of the proposed project, and could be reduced to a less than significant level by providing an adequate storm water drainage system on the project site and by limiting the use of landscape irrigation.

## **2.5 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED**

Input regarding the environmental review of the proposed project was received from the public and interested agencies in response to the Notice of Preparation that was



prepared for the project. Comments submitted in response to the Notice of Preparation are provided in Appendix A of this Revised EIR. Several public hearings have been held regarding the proposed project, including a hearing that was conducted on June 16, 2005, regarding the Draft Mitigated Negative Declaration originally prepared for the project; a hearing conducted in January 2007 regarding the original Draft EIR; and a hearing conducted in June, 2008 regarding the original Proposed Final EIR. Comments that were received at these hearings generally focused on the following major issue areas.

- Project-related impacts to views from La Mesa Park and surrounding areas.
- Access to the project site.
- Impacts to biological resources of Lighthouse Creek.
- Potential slope stability and other geologic impacts.

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

**Significant and Unavoidable (Class I) Impacts**

No significant and unavoidable environmental impacts have been identified

**Significant but Mitigable (Class II) Impacts**

**Aesthetics**

**AES-1.** As presently designed, the proposed residence would have the potential to substantially obstruct existing ocean views provided from important public view points, including views provided from the “benches” area of La Mesa Park and the eastern end of the Lighthouse Creek footbridge.

**AES-1a. Revised Project Design.** Revised project design plans shall be provided to the Single Family Design Board for review and approval. Any structure developed on the project site shall be located within the building envelope depicted on EIR Figure 5.1-10. The envelope generally extends:

- South of the six-foot setback line along the project site’s northern property line depicted on the project plans.
- West of the of the 86-foot contour depicted on the project plans.
- North of the of the 25-foot top of bluff setback line depicted on the project plans.
- East of the proposed 26-foot building setback from the project site’s western property line, as depicted on the project plans.

The revised project plans shall implement the following design measures:

- 1a.1. The maximum height of the structure’s east elevation shall not exceed 25 feet, as measured from existing grade (Figure 5.1-10).
- 1a.2. The maximum height of the structure’s west elevation shall not exceed 15 feet measured from existing grade (Figure 5.1-10).
- 1a.3. The maximum building elevations for the structure’s east and west elevations shall form a plane above the existing grade of the project site. The height of any structure located on the project site must be located within the building envelope and may not extend above the plane (Figure 5.1-10).
- 1a.4. The proposed residence design shall be revised to substantially reduce or eliminate the use of understory walls.

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

**AES-2. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.**

**AES-2a. Color Approval.** Proposed paint and material colors to be used on the residence shall be approved by the Single Family Design Board. Building colors shall consist of neutral or earth-tone colors. Subsequent color changes proposed for the residence shall be approved by the Single Family Design Board.

**AES-3 Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.**

**AES-3a. Landscape Plan Review.** Proposed landscape planting materials shall be approved by the Single Family Design Board. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature, will not attain a height that exceeds the height of the residence.

**Biological Resources**

**Proposed construction activities have the potential to disturb vegetation within and adjacent to Lighthouse Creek.**

**BIO-1 Habitat Restoration.** Areas between the proposed building site and Lighthouse Creek disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods. Vegetation shall be removed by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of bare slopes to prevent short-term erosion. The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff and Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

**BIO-2 Appropriate Plants/Hardscape on Bluff.** Special attention shall be paid to the appropriateness of the existing and proposed plant material on the sloped areas.

All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed using hand and/or chemical methods and replaced with appropriate

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's report, dated January-February 2006. The landscape plan shall be provided to the Community Development Department Staff and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

**BIO-3 Irrigation System.** The irrigation system shall be designed and maintained with the most current technology to prevent a system failure, and watering of vegetation on the bluff shall be kept to the minimum necessary for plant survival. The drip system along the bluff shall be removed after two full seasons of plant growth.

**BIO-4 Erosion Control/Water Quality Plan.** An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City.

**BIO-5 Streambed Alteration Agreement.** The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Game, prior to submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.

**Geologic Hazards**

**GEO-1 An inadequate drainage system on the project site would have the potential to result in a significant slope stability impact.**

**GEO-1a. Surface Drainage.** All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to Lighthouse Creek east of the parcel. Landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

**GEO-2 The proposed project has the potential to be affected by subsidence and expansive soil impacts.**

**GEO-2a Foundation Design Approval.** The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

**Hazards**

**The proposed project has the potential to result in a significant fire safety impact.**

- H-1 Automatic Fire Sprinklers.** New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.
- H-2 Monitored Fire Alarm System.** A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.
- H-3 Compliance with High Fire Construction Requirements.** The new residence shall be build in accordance with the City's High Fire Construction requirements.
- H-4 Fire Protection System Maintenance.** The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.

**Transportation**

**The proposed use of existing driveway easements for project site ingress/egress has the potential to result in a significant access-related impact.**

- T-1 Evidence of Adequate Access.** Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.

**Water Resources**

**The proposed project has the potential to result in significant short- and long-term water quality impacts.**

- W-1 Drainage and Water Quality.** The project is required to comply with Tier 3 of the Storm Water Management Plan (treatment, rate and volume). The Owner shall submit drainage calculations prepared by a registered civil engineer or licensed architect demonstrating that the new development will comply with the City's Storm Water Management Plan. Project plans for grading, drainage, stormwater facilities and treatment methods, and project development, shall be subject to review and approval by the City Building Division and Public Works Department. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water pollutants (including, but not limited to trash, hydrocarbons, fertilizers, bacteria, etc.), or groundwater pollutants would result from

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

the project.

The Owner shall provide an Operations and Maintenance Procedure Plan (describing replacement schedules for pollution absorbing pillows, etc.) for the operation and use of any storm drain surface pollutant interceptors that are provided on the project site. The Plan shall be reviewed and approved consistent with the Storm Water Management Plan BMP Guidance Manual.

**Less Than Significant (Class III) Impacts  
(Recommended Mitigation Measures)**

**Air Quality**

**The proposed project would result in dust and criteria pollutant emissions during construction operations.**

The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities:

- AQ-1** During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- AQ-2** Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- AQ-3** If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- AQ-4** Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- AQ-5** After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- AQ-6** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

land use clearance for finish grading of the structure.

- AQ-7** All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- AQ-8** Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at [www.arb.ca.gov/msprog/ordiesel/ordiesel.htm](http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm).
- AQ-9** All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- AQ-10** Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- AQ-11** Diesel powered equipment should be replaced by electric equipment whenever feasible.
- AQ-12** If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
- AQ-13** Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- AQ-14** All construction equipment shall be maintained in tune per the manufacturer's specifications.
- AQ-15** The engine size of construction equipment shall be the minimum practical size.
- AQ-16** The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- AQ-17** Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

**Cultural Resources**

**Ground disturbing operations at the project site have the potential to adversely affect previously undetected archaeological resources.**

- CR-1 Unanticipated Archaeological Resources Contractor Notification.** Standard discovery measures shall be implemented per the City master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Owner shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.

If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.

**Noise**

**Project-related construction activities have the potential to result in a short-term increase in noise levels adjacent to the project site.**

- N-1      Neighborhood Notification Prior to Construction.** At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the (Project Environmental Coordinator (PEC) and Contractor(s), site rules and Conditions of Approval pertaining to construction activities, and any additional information that will assist Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.



**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

**N-2 Construction Hours.** Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays between the hours of 9:00 a.m. and 4:00 p.m., excluding the following holidays:

New Year's Day	January 1st*
Martin Luther King's Birthday	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th*
Labor Day	1st Monday in September
Thanksgiving Day	4th Thursday in November
Following Thanksgiving Day	Friday following Thanksgiving Day
Christmas Day	December 25th*

\*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday.

When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the Chief of Building and Safety to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.

**N-3 Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

**Public Services**

**The proposed project would result in the short-term generation of construction and demolition waste.**

**PS-1 Construction Materials Recycling.** Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the site.

**Table 2.3–1**

**1837½ El Camino de la Luz Residence EIR  
Impacts and Proposed Mitigation Measures**

**Transportation**

**Project-related construction activities would result in a short-term increase in traffic and parking demand in the project neighborhood.**

- T-2 Construction Traffic.** The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.
- T-3 Construction Parking.** Construction parking and vehicle/equipment/materials storage shall be provided as follows:
1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.
  2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.

**Water Resources**

**Inadequate drainage system maintenance would have the potential to result in drainage and water quality impacts.**

- W-2 Storm Water Pollution Control and Drainage Systems Maintenance.** Owner shall maintain the drainage system and storm water pollution control devices in a functioning state. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Coastal Development Permit is required to authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.



### **3.0 PROJECT DESCRIPTION**

The 1837½ El Camino de la Luz project would result in the development of one single-family dwelling on an ocean bluff lot that is approximately one-half acre in area. A detailed description of the proposed project is provided below.

#### **3.1 PROJECT APPLICANT**

Dr. Herb Barthels  
1809 Cliff Drive, Suite C  
Santa Barbara, CA 93109

#### **3.2 PROJECT LOCATION**

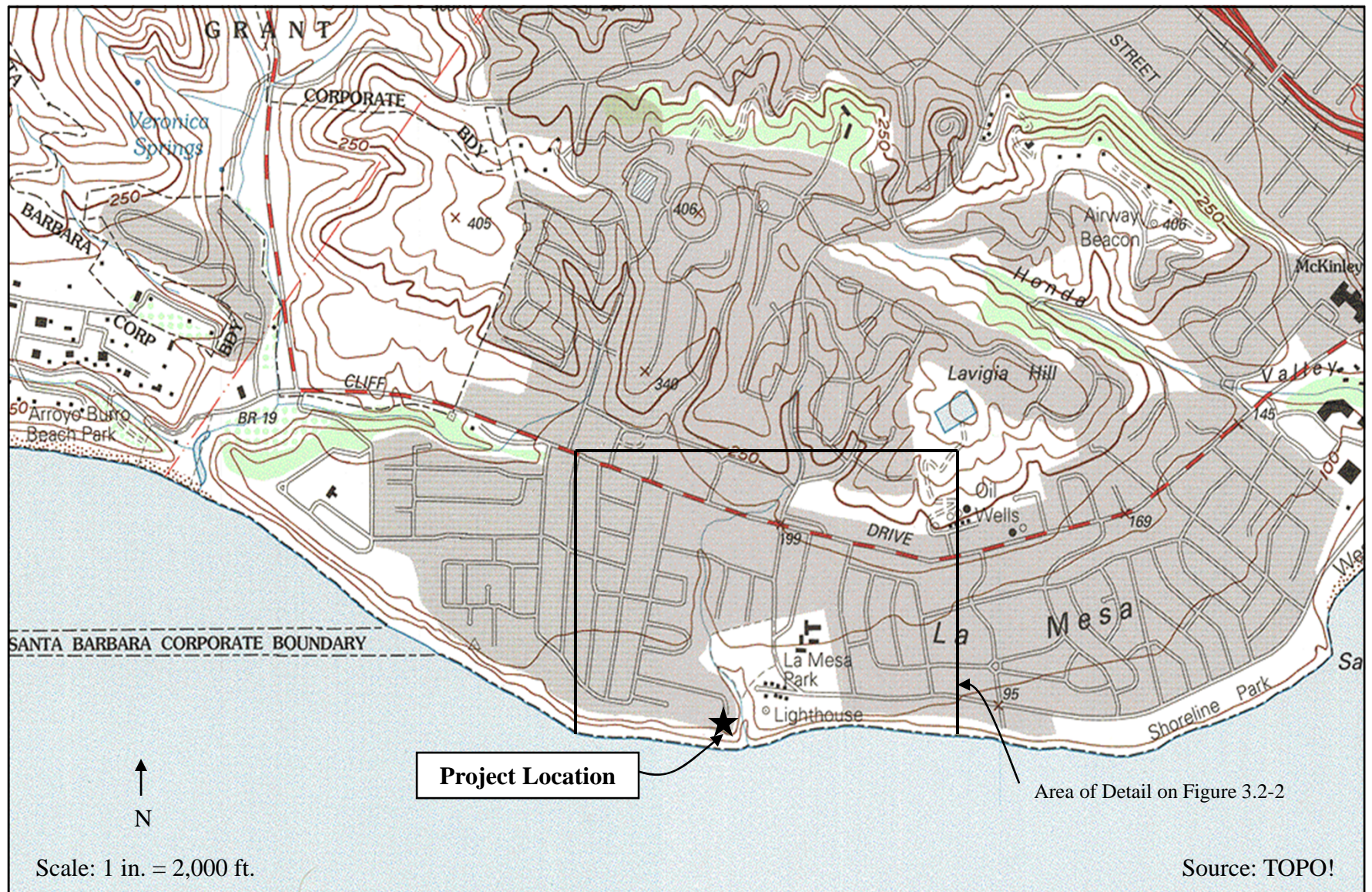
The proposed project site is located at 1837½ El Camino de la Luz, which is located in the West Mesa neighborhood of the City of Santa Barbara. The 23,885 square foot (0.55-acre) project parcel is bounded by residences to the north and west, Lighthouse Creek to the east, and the Pacific Ocean to the south. The project site is approximately 550 feet southwest of the southern boundary of La Mesa Park, which is located west of and adjacent to Meigs Road. Figures 3.2-1 and 3.2-2 depict the location of the project site.

#### **3.3 PROJECT CHARACTERISTICS**

The proposed residence would be a two-story building located in the northwestern portion of the project site. Access to the residence would be provided along driveway easements of 10-15 feet in width that extend southward from El Camino de la Luz to the northwest corner of the project parcel.

The topography of the project parcel is varied. A relatively level area is provided in the northwestern corner of the site, while moderately steep slopes extend from the proposed development area eastward towards the channel of Lighthouse Creek, and southward to the top of the ocean bluff. The southern portion of the project parcel consists of a steep bluff approximately 70-90 feet in height that extends to the beach and the Pacific Ocean. The portion of the project site that would be used for the development of the proposed residence slopes gently to the east and has ground surface elevations that range from approximately 102 feet above sea level in the northwest corner to approximately 85 feet above sea level in the southeast corner. The project site access driveway, topography and the location of the proposed residence are depicted on the site plan provided on Figure 3.3-1.



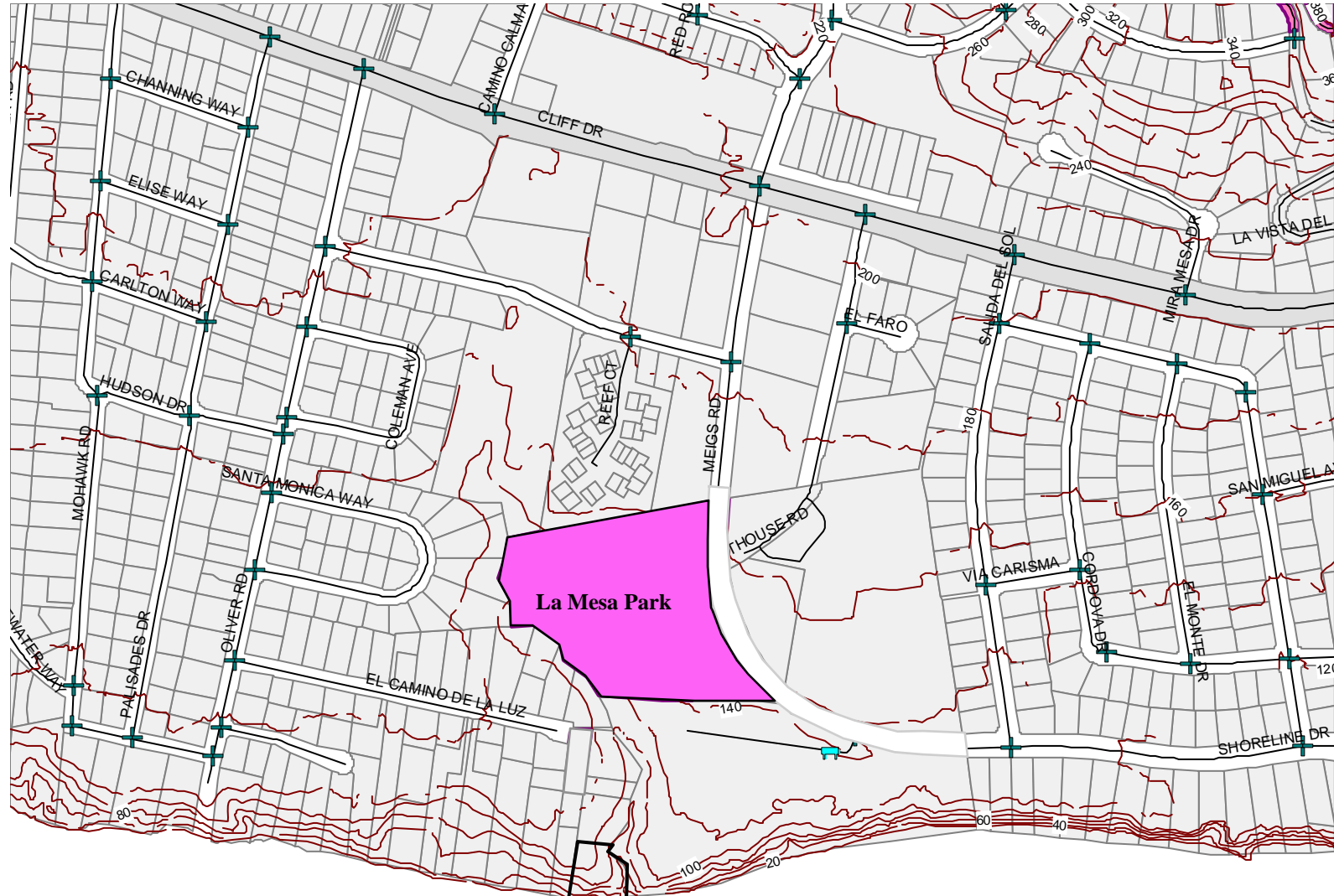


City of Santa Barbara

1837½ El Camino de la Luz

**Figure 3.2-1**  
Regional Topography





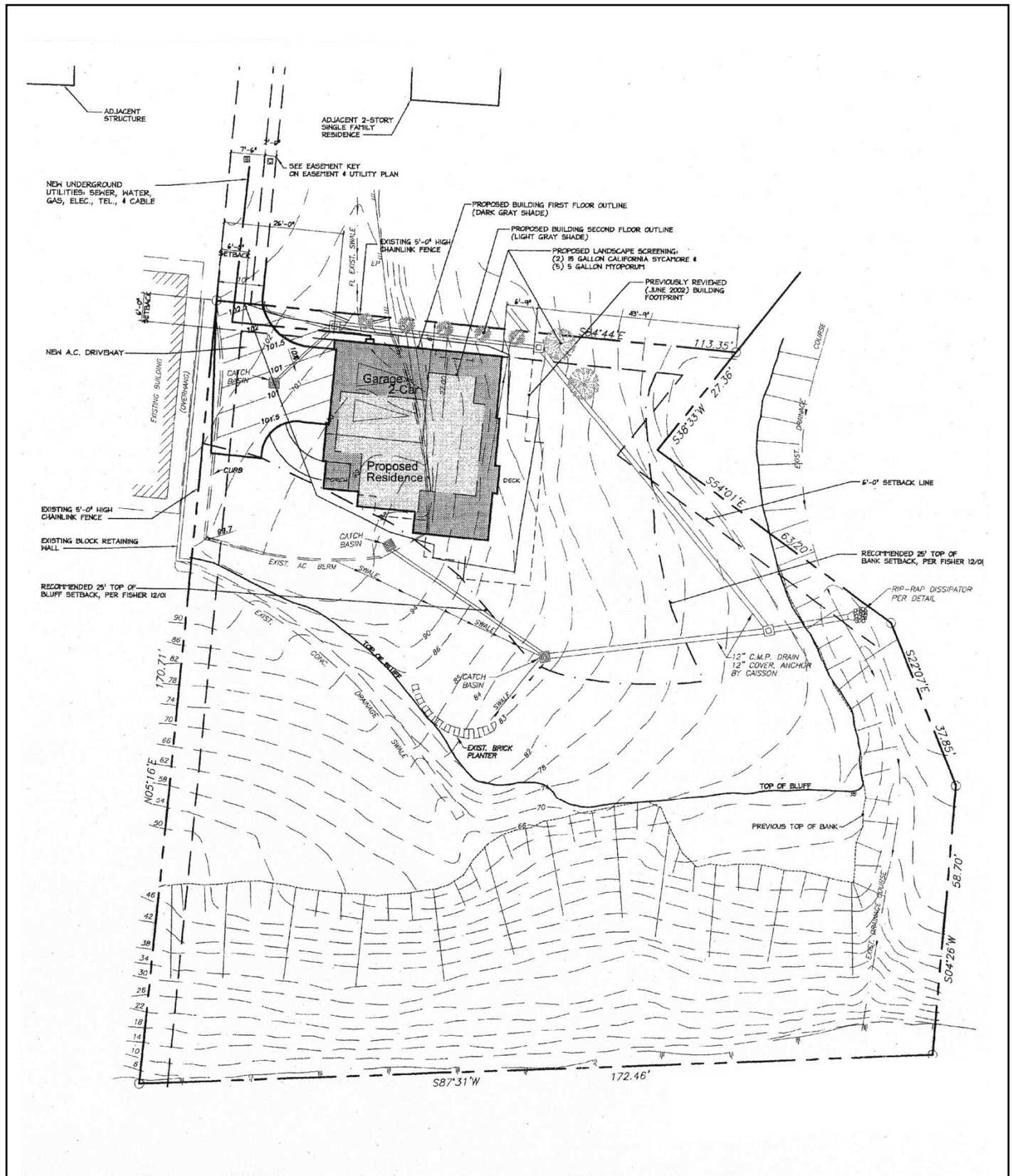
Scale: 1 in. = approx. 600 ft.

Project Site

City of Santa Barbara

1837½ El Camino de la Luz

**Figure 3.2-2**  
**Project Location**



Not to Scale

Source: Peikert Group Architects

City of Santa Barbara

1837 1/2 El Camino del la Luz

Figure 3.3-1

Site Plan

### 3.3.1 Structure Size

The proposed residence would provide a total building area of 1,942 square feet, consisting of 1,499 square feet of livable area and a 443 square foot two-car garage. The structure would have a total “footprint” area (first floor residence plus garage) of 1,336 square feet, and a second floor area of 606 sq. ft. Project parcel and proposed building size data is summarized on Table 3.3-1.

**Table 3.3-1**  
**1837½ El Camino de la Luz**  
**Project Site and Proposed Residence Size Summary**

<b>Project Site</b> <ul style="list-style-type: none"> <li>• Parcel Size</li> <li>• Buildable Area (1)</li> </ul>	23,885 sq. ft. (0.55 acre) Approximately 5,254 sq. ft. (22% of parcel area)
<b>Proposed Residence</b> <ul style="list-style-type: none"> <li>• First Floor Livable Area</li> <li>• Second Floor Area</li> <li>• Total Liveable Area</li> <li>• Garage Area</li> <li>• Total Floor Area</li> </ul>	893 sq. ft. 606 sq. ft. 1,499 sq. ft. 443 sq. ft. 1,942 sq. ft.
<b>Site Coverage</b> <ul style="list-style-type: none"> <li>• Residence and Garage</li> <li>• Driveway</li> <li>• Total Development Area</li> </ul>	1,336 sq. ft. (5.6% of total parcel area) (25.4% of parcel buildable area)  752 sq. ft. (3.1% of total parcel area) (14.3% of parcel buildable area)  2,088 sq. ft. (8.7% of total parcel area) (39.7% of parcel buildable area)
<b>Open Area</b> <ul style="list-style-type: none"> <li>• Total Parcel</li> <li>• Buildable Area Only</li> </ul>	21,797 sq. ft. (91.3% of total parcel area)  3,166 sq. ft (60.3 % of parcel buildable area)

(1) The “buildable area” of the project site is that portion of the site north of the proposed setback from the top of the ocean bluff, and west of the proposed setback from the top of bank for Lighthouse Creek. The proposed “buildable area” is depicted on Figure 3.3-1.



### **3.3.2 Elevations**

The appearance of the proposed residence is depicted on the building elevations provided on Figures 3.3-2 and 3.3-3. The western elevation of the residence would provide the primary entrance to the residence and to the garage. As measured from existing and proposed grade, the western elevation would have a maximum height of approximately 21 feet. The proposed development area slopes downward to the east, and as a result the maximum height of the northern, southern and eastern elevations would be approximately 35 feet above existing grade. Also due to the downward slope of the proposed building site, an 8- to 11-foot high understory wall would be visible along the entire eastern elevation of the residence.

### **3.3.3 Floor Plans**

The proposed floor plan for the first story of the residence would include a two-car garage, entry, dining and living area, laundry, powder room, and an exterior deck. The second floor would provide two bedrooms, two bathrooms and small deck area. The proposed floor plans are provided on Figure 3.3-4.

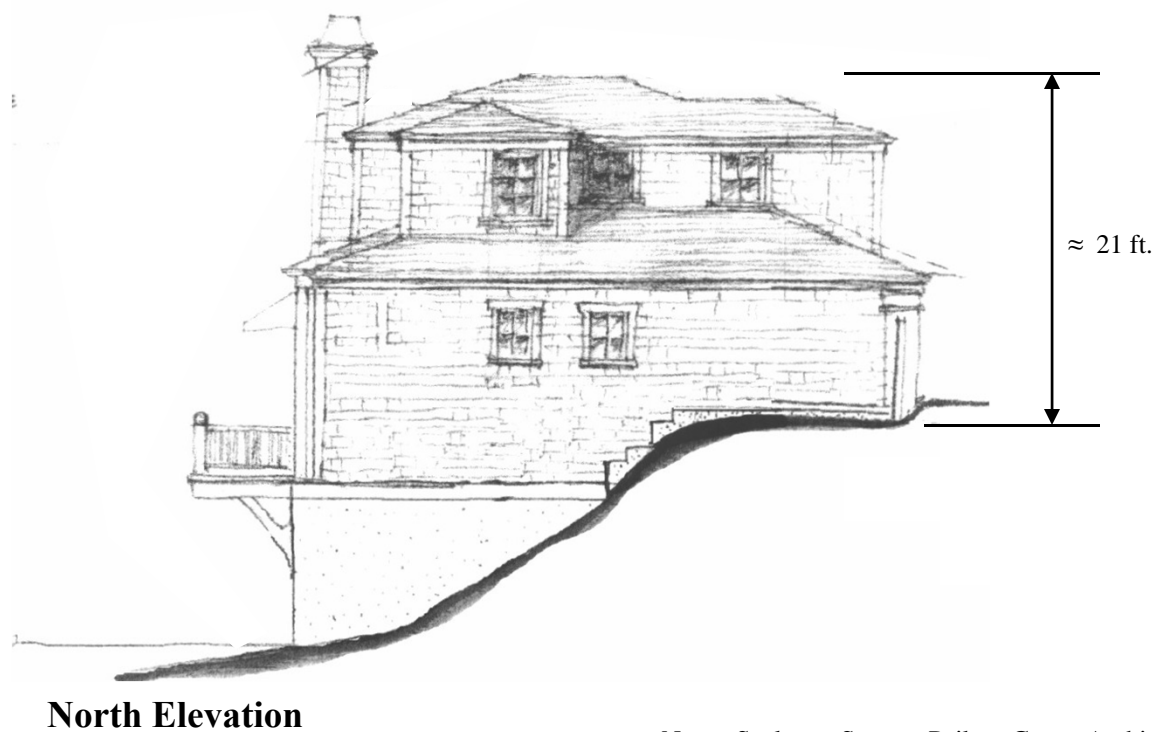
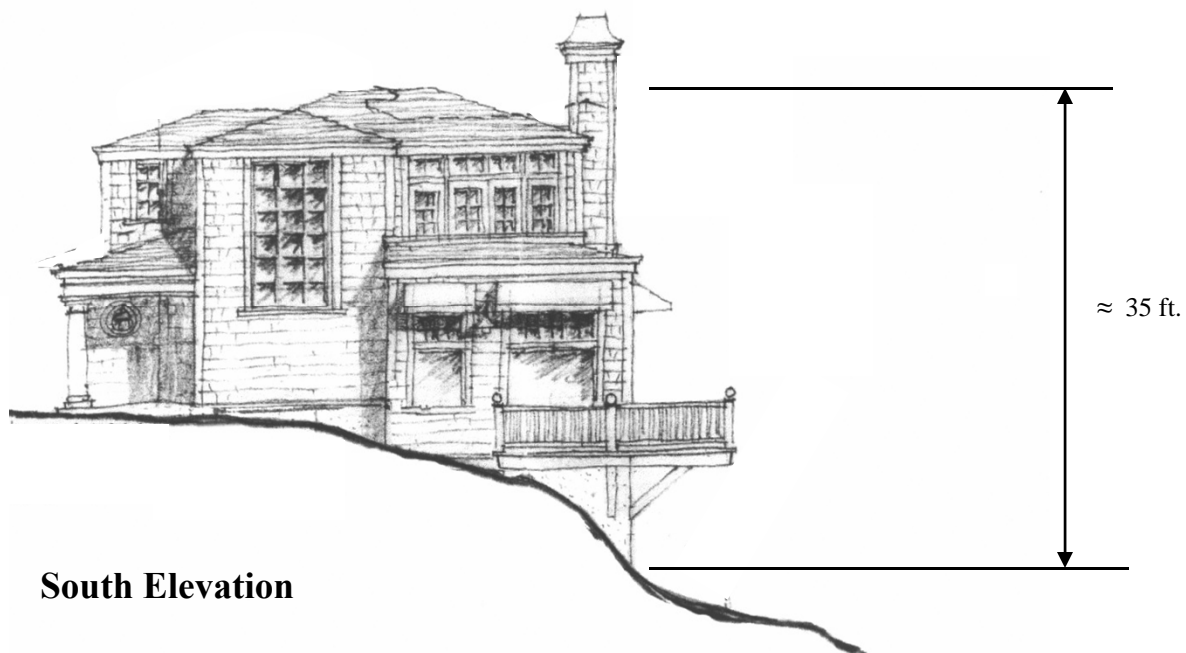
### **3.3.4 Setbacks**

The proposed residence would be located six feet from the northern property line of the project parcel, and 26 feet from the western property line. For slope stability and habitat protection purposes, a 25-foot setback from the top of the ocean bluff and the top of bank for Lighthouse Creek has been proposed. The portion of the project parcel located west of the creek setback line and north of the ocean bluff setback line comprises the developable portion of the project site. The proposed residence would be zero to 13 feet north of the proposed top of bluff setback line, and approximately 32 feet west of the top of creek bank setback line. The locations of all setback areas are depicted on Figure 3.3-1.

### **3.3.5 Grading**

The existing ground surface elevations in the proposed development area of the project site range from approximately 102 feet in the northwest corner to approximately 85 feet in the southeast corner. The finished floor elevation of the garage and entry would be at 99 feet, and the finished floor elevation of the remainder of the first floor would be 95.5 feet. The proposed project plans indicate that no cut or fill would be required to construct the proposed residence, however, it is anticipated that minor earthwork would be required to construct the proposed driveway and to prepare the building foundation.

Storm water runoff from the project site would be collected by a series of proposed swales and catch basins. The collected runoff water would be conveyed by new

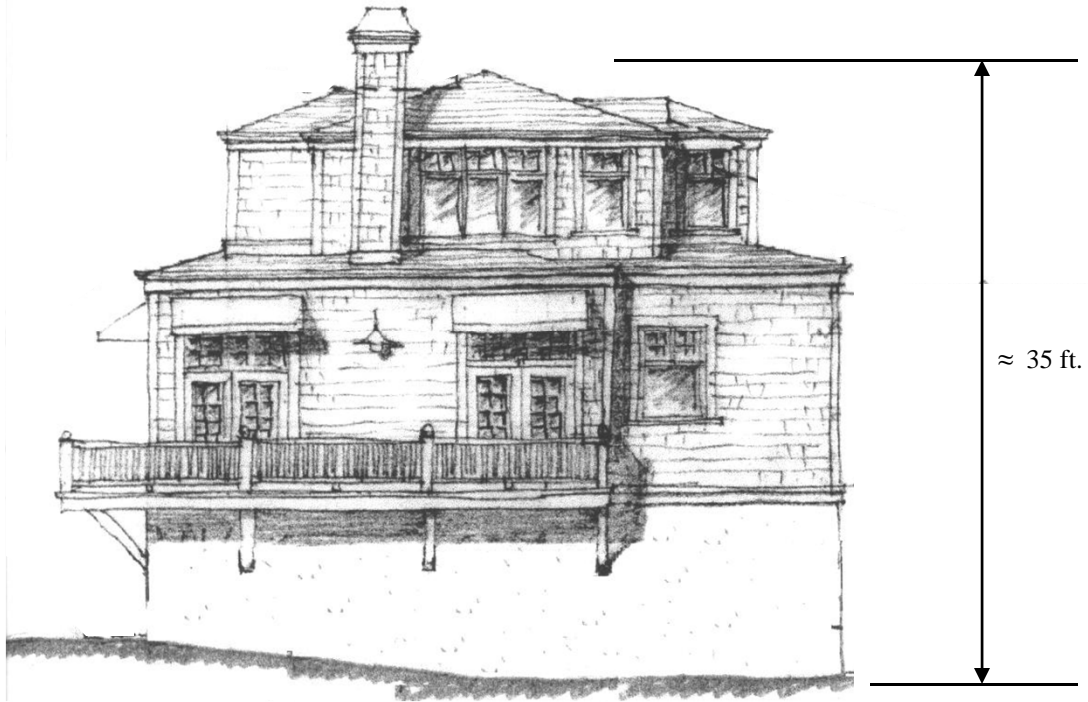


Not to Scale Source: Peikert Group Architects

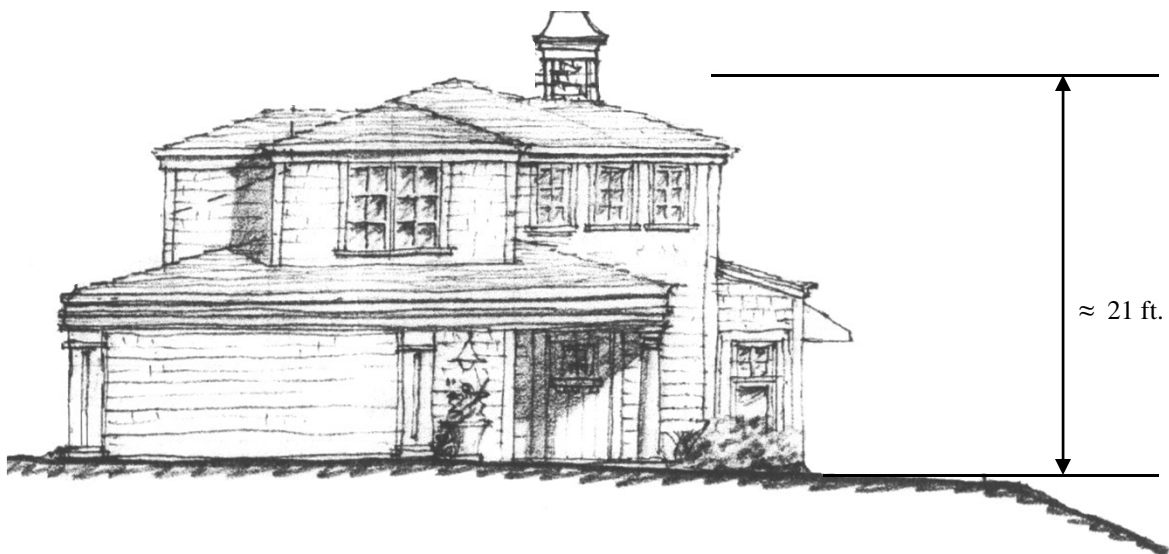
City of Santa Barbara

1837½ El Camino del la Luz

**Figure 3.3-2**  
North and South Elevations



**East Elevation**



**West Elevation**

Not to Scale Source: Peikert Group Architects

City of Santa Barbara

1837½ El Camino del la Luz

**Figure 3.3-3**  
East and West Elevations



**Figure 3.3-4**  
Floor Plans

underground drains and discharged to Lighthouse Creek. Energy dissipating rip rap would be placed in the creek at the proposed discharge location to minimize the potential for erosion-related impacts. The proposed project site drainage system is depicted on the Figure 3.3-1

### **3.3.6 Landscaping**

Landscaping would be provided along the northern perimeter of the project parcel to screen views of the residence from viewing locations to the north. The proposed landscape screen would include five 5-gallon myoporum bushes and two 15-gallon California sycamore trees.

### **3.3.7 Other Site Development Elements**

Utilities for the proposed residence, including sewer, water, gas, electricity, telephone and cable would be extended underground to the project site.

## **3.4 REQUIRED APPROVALS**

The proposed project would require approvals of the following discretionary permit applications:

1. A Coastal Development Permit to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.44.060); and
2. A Modification to allow construction of the new residence on a lot without the required 60-foot frontage on a public street (SBMC §28.15.080); and
3. Single Family Design Board approval (SBMC §22.69).

## **3.5 PROJECT OBJECTIVES**

For the purposes of this environmental review, it was assumed that the objectives of the proposed project are to develop a residence on the project site that will:

1. Provide a reasonable use of the developable portion of the project site.
2. Minimize environmental impacts related to slope stability and other geological hazards and process.
3. Minimize environmental impacts related to the obstruction of scenic vistas.

## **4.0 ENVIRONMENTAL SETTING**

This section provides a brief description of the conditions that exist on the proposed project site and in the project area.

### **4.1 PROJECT AREA SETTING**

The 1837½ El Camino de la Luz Residence project site is located in the southwestern portion of the City of Santa Barbara in the West Mesa neighborhood. This neighborhood is developed primarily with single-family residences, however, multi-family units and commercial uses are also provided. The area near the proposed project site is developed primarily with single-family residences. Views of the Santa Ynez Mountains to the north and the Pacific Ocean to the south are provided from locations throughout the West Mesa neighborhood.

### **4.2 PROJECT SITE SETTING**

#### **4.2.1 Existing Conditions**

The proposed project site is a bluff-top lot bordered by the Pacific Ocean to the south and Lighthouse Creek to the east. The bluff-top area is characterized by an average slope of approximately 25%. The seacliff portion of the property includes several sections with varying slopes, ranging from approximately 65-94%. The eastern portion of the site includes slopes of approximately 25% to the top of the bank of Lighthouse Creek, which is deeply incised.

The project site is currently vacant. Previous improvements to the site include an asphalt parking area, concrete drainage swales, and a brick planter. Access to the site is provided by private easements extending south from the El Camino de la Luz cul-de-sac.

Vegetation on the project site is primarily comprised of non-native species typical of disturbed areas. Native plants include California blackberry, poison oak, California sage brush and California fuchsia. Wildlife observed or expected on this site includes those species typical of urbanized areas and the urban fringe.

#### **4.2.2 Zoning and Land Use Designations**

The General Plan land use designation of the project site is “Residential, 5 units per acre.” The project site is in the “E-3” (One-Family Residence) Zone, SD-3 (Coastal Overlay) Zone, and Hillside Design District.

#### **4.2.3 Surrounding Land Uses**

Land uses in the vicinity of the project site are generally described on Table 4.2-1 and depicted on Figure 4.2-1.

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Proposed Project Property

Proposed Building Site

Lighthouse Creek

El Camino de la Luz

Lighthouse Creek Bridge

La Mesa Park

City of Santa Barbara

1837½ El Camino del la Luz

**Figure 4.2-1**  
Project Area



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**Table 4.2-1**  
**Adjacent Land Uses**

<b>Direction</b>	<b>Land Uses</b>
North	The project site is bordered by a single-family residence to the north. Other residences are also located north of the project site along El Camino de la Luz. The residential areas adjacent to the project site are zoned “E-3/SD-3”. The southern boundary of La Mesa Park is located approximately 550 feet north of the project parcel. The Park is zoned “Parks and Recreation/SD-3.”
South	The Pacific Ocean is adjacent to the project site to the south.
East	Lighthouse Creek borders the project site to the east. East of the creek is a U.S. Coast Guard facility that provides a lighthouse and housing. The area to the east of the project site is zoned “Parks and Recreation/SD-3.”
West	The project site is bordered by another bluff-top single-family residence to the west. Other residences are also located west of the project site in an area zoned “E-3/SD-3”.

### **4.3 CUMULATIVE DEVELOPMENT**

Other reasonably foreseeable probable future development projects located in the vicinity of the proposed project site were identified to evaluate the potential for the proposed project and other development projects to result in significant cumulative impacts. The identified cumulative development projects are described on Table 4.3-1 and their locations are depicted on Figure 4.3-1.

Most of the cumulative development projects included in this analysis are located in the West Mesa Neighborhood, which is the neighborhood where the proposed project is located. However, the largest cumulative development project is located at 210 Meigs Road (south of and adjacent to Washington Elementary School) in the East Mesa Neighborhood. The 210 Meigs Road project consists of a lot line adjustment, General Plan/Local Coastal Plan amendment, zone change and subdivision map that would accommodate the development of five new residences.

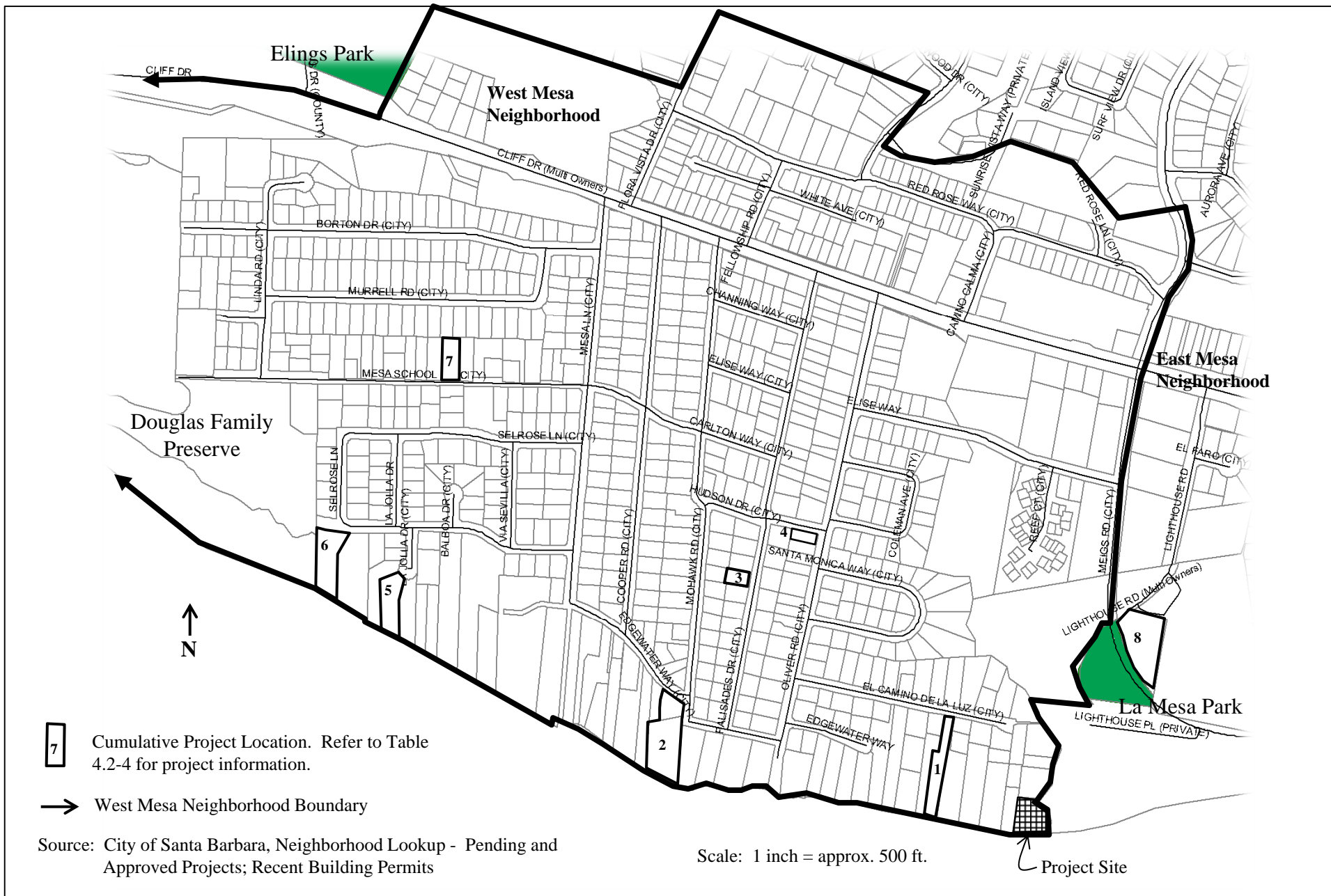
One cumulative development is located at 1925 El Camino de la Luz, and that project would result in the development of a new single-family residence. The 1925 El Camino de la Luz project site is located on property that that was affected by the 1978 El Camino de la Luz landslide. These and other projects located in the vicinity of the proposed project are described on Table 4.3-1.

**Table 4.3-1  
Cumulative Development Projects**

<b>Map No. (1)</b>	<b>Project Location</b>	<b>Proposed Project</b>	<b>Status</b>
1	1925 El Camino de la Luz	New single family residence.	Final action required
2	2215 and 2305 Edgewater Way	Lot Line Adjustment to create two bluff top parcels. Construct new 400 sq. ft. garage for an existing residence on the proposed western parcel. Demolition of an existing carport, construction of a 400 sq. ft. garage and conversion of an existing guest house to a single-family residence on the proposed eastern parcel.	Final action required
3	201 Palisades Drive	546 sq. ft. addition to a 1,577 sq. ft. residence.	Certificate of Occupancy issued
4	221 Oliver Road	486 sq. ft. addition to a 1,803 sq. ft. residence, and new second story deck	Final action required
5	157 La Jolla Drive	New 2,686 sq. ft. one-story residence and garage on a 25,391 sq. ft. lot	Final action required
6	2547 Medcliff Road	1,549 sq. ft. foot addition and loft for an existing 2,645 sq. ft. one-story residence	Under construction
7	2510 Mesa School Lane	3035 square foot new residence	Building Permit issued
8	210 Meigs Road	Five lot subdivision to include street improvements and grading. No structures proposed at this time. The project requires a GPA, LCP amendment, zone change and lot line adjustment.	Subdivision approved

(1) Project location Map Numbers are depicted on Figure 4.3-1

Source: [www.santabarbaraca.gov/tm\\_web/query.asp?Activity=MST&Neighborhood=WM](http://www.santabarbaraca.gov/tm_web/query.asp?Activity=MST&Neighborhood=WM). Last accessed, January 27, 2012.





## 5.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section provides an evaluation of the potentially significant environmental effects of the 1837½ El Camino de la Luz Residence project that were identified by the Revised Initial Study. The term “significant effect” is defined by section 15382 of the *CEQA Guidelines* as “a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

In addition to determining that the El Camino de la Luz Residence project has the potential to result in significant environmental impacts, the Revised Initial Study identified potentially significant project-related environmental effects that can be reduced to a less than significant level by implementing proposed mitigation measures. A summary of the mitigation measures identified by the Revised Initial Study to reduce the identified impacts is provided in the Summary (Section 2.0) of this EIR. A Mitigation and Monitoring and Reporting Plan for the mitigation measures recommended by the Initial Study and this EIR is provided in Appendix C.

To aid in the description of project-related environmental impacts, four types of impacts may be identified by the EIR impact analysis:

**Class I. Significant and Unavoidable:** An impact whose effect cannot be reduced below significance through the implementation of reasonably available and feasible mitigation measures. For such an impact, section 15093 of the *CEQA Guidelines* requires that the Lead Agency adopt a Statement of Overriding Considerations if the project is approved.

**Class II. Potentially Significant but Mitigable:** An impact that can be reduced to below a level of significance by implementing reasonably available and feasible mitigation measures. For such an impact, section 15091 of the *CEQA Guidelines* requires the Lead Agency to adopt findings that the impact has been reduced to a less than significant level if the project is approved.

**Class III. Less Than Significant:** A project may result in environmental impacts that are adverse, however, the effect of the impact does not exceed the applicable threshold of significance. These impacts are considered to be “less than significant” and mitigation measures to reduce the impact are not required by CEQA. However, in some instances, mitigation measures are recommended that would minimize these effects and their contribution to cumulative impacts.

**Class IV. Beneficial:** An effect that would reduce existing environmental problems or hazards may be referred to as a “beneficial” impact.

## 5.1 AESTHETIC IMPACTS AND MITIGATION MEASURES

The Revised Initial Study (ENV 2002-00214) prepared for the 1837½ El Camino de la Luz project determined that the development of the proposed residence would have the potential to result in a potentially significant aesthetic impact. This conclusion was based on the determination that views of the Pacific Ocean and Santa Cruz Island are provided from La Mesa Park and the footbridge that crosses Lighthouse Creek south of the park. The ocean and Channel Islands are depicted by the City's Local Coastal Plan "Visual Resources in the Coastal Zone" map as being significant visual resources. The Revised Initial Study also concluded that views of the ocean provided across La Mesa Park from the southbound lane of Meigs Road are only briefly available from passing cars. However, the brief ocean view to motorists, and more extended views provided to pedestrians and bicyclists were considered to be an important public scenic views.

This section evaluates the potential for the proposed project to result in significant impacts to identified important visual resources, specifically views of the Pacific Ocean and Channel Islands that are provided from La Mesa Park, the Lighthouse Creek footbridge and Meigs Road. The evaluation of potential aesthetic impacts has focused on changes to existing ocean views because such views are generally considered to be scenic and desirable, and contain important visual resources. To assist in this evaluation, photo-simulations depicting conditions that would exist after the development of the proposed project have been prepared for selected important public views provided from La Mesa Park and the Lighthouse Creek footbridge. Due to the very brief ocean views that are generally provided from the southbound lane of Meigs Road, project-related photo-simulations of views provided from the roadway were not prepared for this EIR.

Conclusions regarding the potential for the proposed project to result in significant impacts to important public scenic views were made by comparing project-related changes to existing visual conditions to a predetermined set of visual resource threshold criteria. Project-specific impact evaluations are provided for each significance criterion. The evaluation of potential visual impacts also considers a reasonable range of design alternatives for the proposed project. The evaluation of project alternatives is provided in Section 8.0 (Alternatives) of this EIR.

This section of the EIR uses a variety of terms to describe and evaluate the visual conditions of the project area. Definitions of these terms are provided below:

- **Views.** Anything that can be seen.
- **Public views.** Views experienced from public places.
- **Visual resources.** Items such as natural features, trees, landscaping, or buildings within a view.
- **Important visual resources.** Items within a view deemed to be important.



- **View corridor.** A view almost completely framed on both sides by existing development (including landscaping), large enough to provide a sense of contrast between the urban area in the foreground and important visual resources in the background.
- **Important public scenic views.** Public views that contain important visual resources, have scenic qualities, and are visible from heavily visited viewing areas.
- **Viewpoint.** The vantage point or location from which a view is experienced.
- **Visual context.** The visual resources that are associated with and comprise a particular physical setting. The visual context changes from one location to another. The basis of the visual context stems from both the existing physical setting and the aesthetic expectations as described in existing plans and policies.

### 5.1.1 Setting

**Project Site Conditions.** The project site is a bluff-top property located at the southern end of El Camino de la Luz. The northwestern portion of the project parcel is the proposed building site for the new residence. The project development area is partially paved, and unpaved areas support sparse coverage by mostly weedy plant species. The northeastern portion of the project parcel is covered by mostly non-native/ornamental shrubs. The northern portion of the site slopes moderately, then steeply towards the Lighthouse Creek channel along the eastern perimeter of the project parcel. Lighthouse Creek is an ephemeral creek that contains water for short periods after rainfall events. The central portion of the project parcel slopes southward and contains a mix of native and non-native shrubs. The southern portion of the parcel is a steeply sloping ocean bluff that is sparsely covered with native and non-native plants.

The proposed building area has been extensively disturbed by previous uses on the project site and portions of the project property adjacent to the proposed building area to the east and south are overgrown with vegetation. The project site does not provide unique or important visual qualities. The site does, however, provide extensive views of the Pacific Ocean to the south.

**Surrounding Conditions.** The project parcel is located in an urbanized area developed with generally small- to moderately- sized one and two story homes. The parcel west of and adjacent to the project site is occupied by a single story residence, and the adjacent parcel to the north contains one- and two-story structures. A U.S. Coast Guard facility is located on the east side of Lighthouse Creek, and the Pacific Ocean borders the project property to the south. Including the residences adjacent to the project site to the west and north, there are six one- and two-story houses located along the southward extension of El Camino de la Luz.

The southern boundary of La Mesa Park is located approximately 550 feet north of the project parcel. La Mesa Park is a City-owned park that provides picnic facilities, play equipment, and grass-covered areas for active and passive recreation. The park is bounded by Meigs Road to the east, Lighthouse Creek to the west, residential uses to the north, and Lighthouse Creek and U.S. Coast Guard property to the south. A pathway in the southern portion of the Park leads to the footbridge that crosses Lighthouse Creek.

**Important Public Scenic Views.** The Revised Initial Study prepared for the proposed project identified three important public scenic views that would be affected by the proposed project. Existing visual conditions for each of the identified views are described below. Pictures of the identified important public scenic views have also been provided. Figure 5.1-1 depicts the viewpoint location from which the representative view pictures were taken.

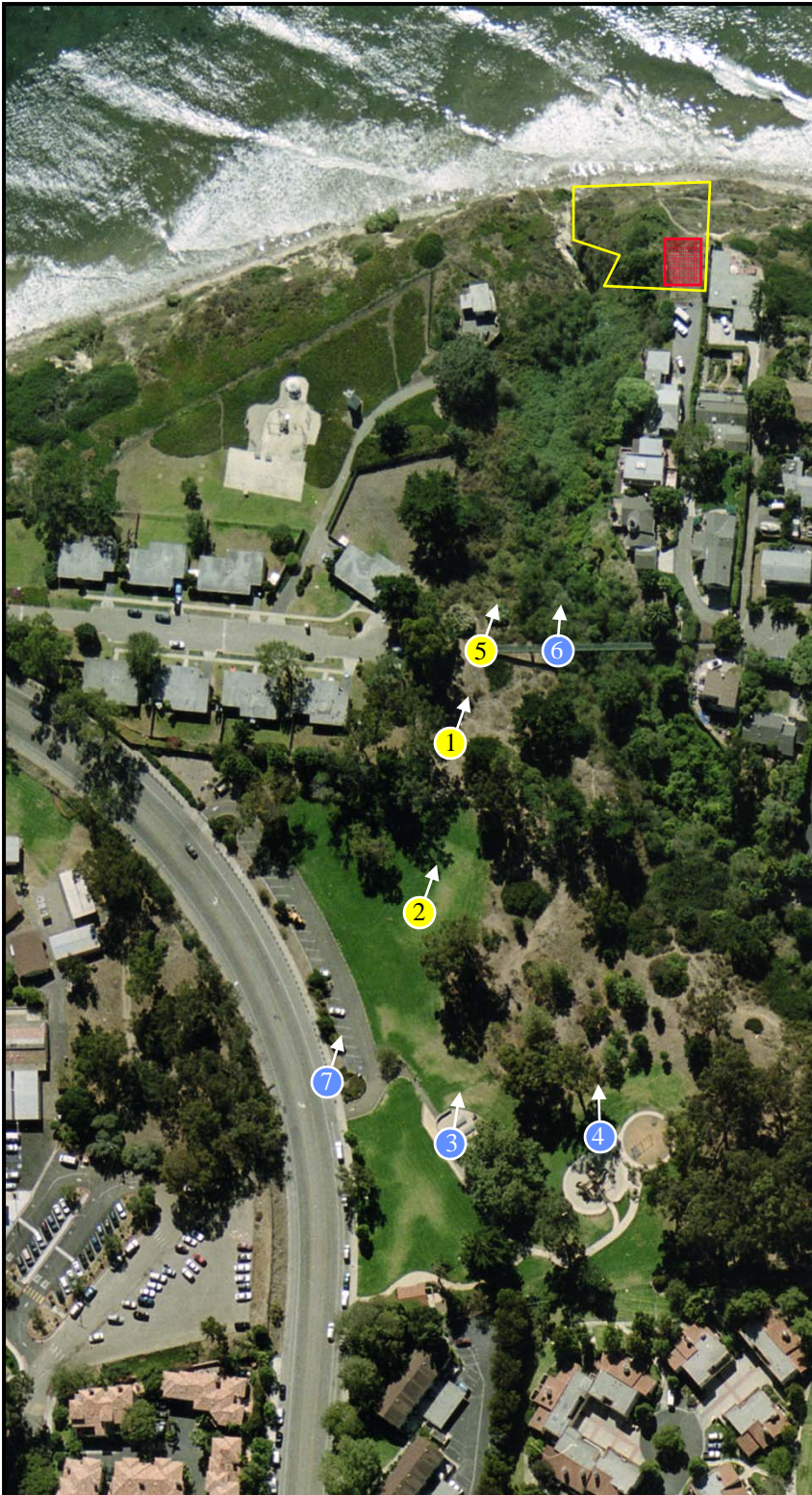
La Mesa Park. Views of the proposed project site and Pacific Ocean are provided from locations throughout the southern half of this public park. From the northern half of the park, views of the project site and ocean are generally obscured by trees and other vegetation. Public views provided from representative locations throughout the park are described below.

*“Benches” Area.* The most prominent locations in La Mesa Park that provide important public scenic views of the project site and Pacific Ocean are located in the very southern portion of the park where several benches have been provided to take advantage of the ocean views. From the “benches” area, foreground views consist of the Lighthouse Creek footbridge, vegetation in Lighthouse Creek, and the three existing residences located on the east side of the project site driveway, which extends southward from El Camino de la Luz. Since there is presently no structural development on the project site, the property is not generally distinguishable from the surrounding open space area to the east. From the “benches” area, background views are dominated by the Pacific Ocean and when atmospheric conditions allow, Santa Cruz Island can be seen. Due to topographic differences, views of the beach are not provided from this view point. A representative view of the visual resources that can be seen from one of the benches located in the southern portion of La Mesa Park is provided on Figure 5.1-2.

From the “benches” area, a view corridor oriented towards the ocean and Santa Cruz Island is framed to the west by the houses located along the east side of the project site driveway. The western edge of the view corridor is also partially defined by a landscape tree that is seen as projecting above the horizon. Views of the ocean are framed to the east by dense vegetation. This vegetation also serves to screen views of structures located on the adjacent Coast Guard property.

The importance of the view corridor provided from the “benches” area is increased due to the location of the viewing area in a public park. The southern portion

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- Photo Location
- Photo and Visual Simulation Location

- 1 La Mesa Park  
"Benches" Area
- 2 La Mesa Park  
Southern Lawn Area
- 3 La Mesa Park Picnic  
Area
- 4 La Mesa Park  
Playground
- 5 Lighthouse Creek  
Bridge – East End
- 6 Lighthouse Creek  
Bridge – Center
- 7 Meigs Road



1 inch = approximately 185 feet

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**Figure 5.1-1**  
View Corridor Picture Locations

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**1 - View From the “Benches” Area**



**2 - View From the Southern Lawn Area**



**3 - View From the Picnic Area**



**4 - View From the Playground**

See Figure 5.1-1 for Photo Location Key

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**Figure 5.1-2**

Existing Views Towards the Project Site from La Mesa Park

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of La Mesa Park, which primarily provides passive recreation opportunities, allows park users to experience this important public scenic view for extended periods of time.

*Southern Lawn Area.* Areas located throughout the southern portion of La Mesa Park also provide important public scenic views of the ocean, Santa Cruz Island when atmospheric conditions allow, and limited views of the project site. Views of the ocean are provided from the southern lawn area, but the view corridor is limited in extent by dense vegetation to the east and west. From the southern lawn area, the proposed project site and homes located on the east side of the project site driveway are only faintly visible as they are obscured by the trees and shrubs located on the west side of the view corridor. A representative view of the ocean as seen from the southern lawn area view corridor is provided on Figure 5.1-2. The importance of this important public scenic view is also increased due to its location in a public park and the passive recreation uses that may occur in this area that allow park users to experience the view for extended periods of time.

*Picnic Area.* The northern areas of La Mesa Park provide active recreation facilities, including a large group picnic area. Views towards the project site and ocean from the picnic area are generally obscured by existing vegetation. Figure 5.1-2 provides a representative view to the south from the small stage that is provided in the picnic area. From the picnic area, only isolated and somewhat vague ocean views are provided through the vegetation and the project site cannot be seen. Therefore, important public scenic views are not provided from this portion of La Mesa Park.

*Playground.* Another active recreation facility provided in the northern portion of La Mesa Park is the playground, which is located west of the picnic area. Similar to the views provided from the picnic area, views from the playground towards the project site and ocean are generally obscured by existing vegetation. Figure 5.1-2 provides a representative view to the south from the playground. As depicted by the Figure, only isolated and somewhat vague ocean views are provided through the vegetation and the project site cannot be seen. Therefore, important public scenic views are not provided from this portion of La Mesa Park.

*Lighthouse Creek Footbridge.* The footbridge located south of La Mesa Park crosses the Lighthouse Creek channel and offers a variety of views of the project site and surrounding areas. The most prominent view of the project site is provided from the eastern end of the bridge. From this view point, fore- to mid- ground views are dominated by vegetation in Lighthouse Creek and three existing residences located on the east side of the project site driveway. The location of the project site can be clearly discerned, but it is not visually prominent due to existing vegetation and the absence of structural development. Background views as seen from the bridge include the Pacific Ocean, and when atmospheric conditions allow, Santa Cruz Island. Similar to views provided from the “benches” area, views of the ocean are framed to the east by vegetation, and to the west by the houses located on the east side of El Camino de la Luz.



Due to topographic differences, views of the beach are not provided from the bridge. Figure 5.1-3 provides a representative view from eastern portion of the footbridge.

As a viewer moves closer to the center of the bridge, vegetation in Lighthouse creek still dominates foreground views, and background views of the ocean are provided. Views of the project site and ocean are not provided from the western end of the bridge because of intervening vegetation and the housing along the east side of El Camino de la Luz. A representative view toward the ocean as seen from the central portion of the footbridge is provided on Figure 5.1-3.

As shown on Figure 5.1-3, public views provided from the center of the bridge provide a slight increase in the amount of ocean area that can be seen when compared to views from the “benches” area. However, from the center of the bridge, existing houses to the west and vegetation to the east frame the view corridor. Although prominent important public scenic views of the ocean are provided from the footbridge, the importance of those views is diminished slightly due to the utilitarian function of the bridge to provide pedestrian and bicycle circulation. Although ocean views are provided, it is not the primary purpose of the bridge to provide such views and users of the bridge may, but would generally not be inclined, to experience the views that are provided for extended periods of time. Regardless, views provided from the bridge are considered to be important public scenic views.

**Meigs Road.** Meigs Road is a north-south, two-lane arterial roadway with bike lanes and sidewalks provided on the east and west sides of the road. South of La Mesa Park, the roadway bends to the east and becomes Shoreline Drive. Meigs Road has not been designated as a scenic roadway by the City.

A representative view toward the project site as seen from the edge of the southbound lane of Meigs Road is provided in Figure 5.1-3. This public view consists of three distinct zones: foreground views of the La Mesa Park parking lot; mid-ground views of the lawn area in the southern portion of the Park; and background views of dense vegetation and the ocean. Views towards the project site are not provided from the northbound lane of Meigs Road. Views toward the project site from Meigs Road are only briefly available to southbound motorists and bicyclists due to travel speed and the upcoming curve in the road. Pedestrians, however, may take the opportunity to experience the view for long periods of time. The importance of the ocean views provided from the southbound lane of Meigs road is diminished by the brief duration of the view that is generally provided, and visual distractions that occur in the La Mesa Park parking lot, such as the automobile depicted in Figure 5.1-3. Despite these constraints, views provided from Meigs Road are considered to be important public scenic views.

**Other Views.** From the beach located south of and adjacent to the project property, views towards the project site are primarily of the steep ocean bluff. The neighboring residence to the west of the project site is partially visible. Due to the proximity of the steep sea cliff to the beach, views of the Santa Ynez Mountains are not



**5 – View from East End of Lighthouse Creek Bridge**



**6 – View from Center of Lighthouse Creek Bridge**



**7 – View from Meigs Road**

See Figure 5.1-1 for Photo Location Key

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**Figure 5.1-3**

Existing Views Towards the Project Site from Other View Corridor Locations

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provided from the beach. Since the project site is only marginally visible as seen from the adjacent beach area, public views of the project site as seen from the beach are not important public scenic views.

There are six existing homes on the southern extension of El Camino de la Luz. The homes adjacent to the project site to the north and west have views of the ocean. Ocean views from other homes located along El Camino de la Luz may be provided from second stories or balconies that extend over the Lighthouse Creek channel.

### **5.1.2 Impact Significance Thresholds**

CEQA indicates that a project would result in a significant environmental effect when it would result in “a substantial, or potentially substantial, adverse change in the environment.” Determining when changes to existing environmental conditions are “substantial” and “adverse” for issue areas such as aesthetics and visual resources can be subjective and subject to personal preferences. To provide an objective evaluation of the proposed project’s potential to impact visual resources, project-related changes to existing visual conditions were compared to a set of predetermined significance criteria. The criteria used to evaluate the proposed project include:

The proposed project would result in a significant aesthetic impact if it would:

- A. Conflict with the applicable vista protection standards, scenic resource protection requirements, or design criteria of the City, or if it would alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by:
  - A-1. Substantially degrading an important public scenic view.
  - A-2. Substantially blocking an important public scenic view corridor.
  - A-3. Substantially impairing the visual context of the area.
- B. Result in substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

For criterion “A,” potential project-related “conflicts with the applicable vista protection standards, scenic resource protection requirements, or design criteria of the City” are evaluated in EIR Section 6.0, Plans and Policies Analysis.

Potential lighting-related impacts under criterion “B” were evaluated by the Initial Study prepared for the proposed project. That evaluation concluded:

“Development of the proposed residence would result in additional lighting. Any exterior lighting would be subject to compliance with the requirements of SBMC §22.75, the City’s Outdoor Lighting and Design Ordinance, and reviewed by the

ABR<sup>1</sup>. The ordinance provides that exterior lighting be shielded and directed to the site such that no undue lighting or glare would affect surrounding residents, roads or habitat areas. Project impacts on lighting and glare would be less than significant.”

Therefore, potential lighting-related impacts of the proposed project would not be significant and no additional evaluation of threshold of significance criterion “B” is required.

Impacts to important public scenic views as seen from the public view points identified in Section 5.1.1 are described in terms of factors such as the extent of view obstruction, and the compatibility of project-related components with surrounding visual resources that comprise the existing visual context. In general, the extent of view obstruction may range from a determination that project-related features would be easily overlooked by an observer, to a conclusion that a substantial amount of an existing important public scenic view would be obscured. Visual compatibility considers whether the proposed development would appear to be out of place or inconsistent when viewed in the context of existing development.

### **5.1.3 Impact Evaluation**

The potential for the proposed project to result in significant aesthetic impacts to the three important public scenic views identified in EIR Section 5.1.1 (ocean views from La Mesa Park, the Lighthouse Creek footbridge, and Meigs Road) is evaluated below. The analysis is arranged to consider the potential for significant impacts relative to each of the significance criteria provided in Section 5.1.2. A similar analysis of proposed alternatives to the proposed project is provided in EIR Section 8.0.

***Threshold A-1.*** *Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially degrading an important public scenic view.*

This threshold indicates that a project would result in a significant aesthetic impact if it would substantially “degrade” an important public scenic view. For the analysis of this threshold, it should not be presumed that the introduction of new development onto a project site would automatically result in a significant degradation of existing visual conditions. For example, a new residence would not necessarily be incongruous or seen as being “out of place” if the project site was located in an urban area or there were other residences that could be seen adjacent to the project site.

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<sup>1</sup> Under current regulations the proposed project would now be evaluated by the Single Family Review Board.

An important public scenic view would be degraded if the proposed project would introduce visual elements or result in environmental conditions that are visually incompatible with the project site or surrounding area. Visual “incompatibility” includes project-related characteristics such as the size or color of a proposed structure, or changes to the appearance of a project site due to grading or the removal of vegetation, that are out of character with existing conditions in the project area. The visual impact criteria considered by threshold A-1 (i.e., building size, color and modifications to the project site) would generally have a similar effect on views provided from each of the identified important public scenic views. Meigs Road, which is the closest major roadway near the project site, has not been designated as a scenic highway by the City of Santa Barbara.

The proposed residence and driveway would be located on a building “footprint” approximately 2,088 square feet in area. The building would be located in the northwestern corner of the project parcel and would occupy approximately 8.7% of the 23,885 square foot project parcel. The proposed building and driveway “footprint” would also occupy approximately 39.7% of the portion of the project parcel that is considered to be buildable. The proposed residence would have two stories and would provide 1,499 square feet of livable area. Including a garage of 443 square feet, the total proposed building floor area would be 1,942 square feet. Based on field observations, the size of the proposed residence would be similar to other one- and two-story residences located along El Camino de la Luz. Therefore, the size of the proposed residence would not be out of character with the surrounding neighborhood and the three important public scenic view corridors in the project area would not be substantially degraded as a result of the size of the proposed residence. Project-related impacts associated with the proposed building size are **less than significant (Class III)**.

As depicted by the proposed building elevations (Figures 3.3-2 and 3), the proposed residence would be provided with a wood shingle exterior surface. Simulations prepared for the proposed project (interacta, 2004)<sup>2</sup> indicate that the shingles would have a natural wood finish. The natural wood color of the shingles would not be out of character with surrounding development, and would be consistent with other elements located in the three important public scenic views provided in the vicinity of the project site. Subsequent changes to the color of the residence that could be made in the future, however, such as the use of bright colors or contrasting combinations of colors, could have the potential to degrade views provided from the three important project area view corridors. **Potentially significant but mitigable (Class II)** impacts to the three important public scenic views in the project area that may be caused by proposed or future color changes to the proposed residence could be reduced to a less than significant level by requiring Single Family Design Board approval of proposed colors and future building color changes.

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<sup>2</sup> The photosimulations prepared by interacta (2004) are provided as Exhibit C in the Initial Study prepared for the proposed project (EIR Appendix A).

As depicted by the proposed building elevations (Figures 3.3-2 and 3), the north and east elevations of the proposed residence would have relatively large understory walls. These walls facilitate the development of the proposed residence on the sloping project site. As described below in the analysis for Significance Threshold A-2, the north and east elevations of the proposed residence would be visible from several important public scenic view points, including the “benches” area of La Mesa Park and the eastern end of the Lighthouse Creek footbridge. Although the understory walls could ultimately be screened with landscaping, their inclusion in the proposed project’s design would contribute to a substantial degradation of existing scenic views by increasing the overall structure height and views of the walls that may remain after project site landscaping matures. This **significant but mitigable impact (Class II)** would be reduced to a less than significant level by providing a revised project design that does not rely on the use of understory walls. The use of understory walls could be eliminated from the project’s design by excavating the structure footprint to place the lower levels of the structure below existing grade.

The development of the proposed residence would require only a minimal amount of grading for foundation preparation, driveway construction, and the installation of the proposed on-site drainage system. Grading required to construct the proposed house would not substantially alter the appearance of the project parcel as seen from off-site public viewing locations. After construction activities are complete, no ground disturbance areas would be visible. Vegetation located in the proposed 2,088 square foot building pad area, and adjacent to the building pad, consists primarily of weedy plant species. The removal of those plants would not result in a substantial alteration to the appearance of the project site. Therefore, grading and vegetation removal required to develop the proposed project would not substantially degrade important public scenic views provided from the three important public view points in the project area, and this impact would be **less than significant (Class III)**.

***Threshold A-2.*** *Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially blocking an important public scenic view corridor.*

This threshold indicates that the proposed project would result in a significant aesthetic impact if it would substantially “block” views provided from one or more of the important public scenic view points described above. For the analysis of this threshold, blocking an existing important public scenic view could result from the introduction of one or more project-related elements that substantially reduces or interferes with an existing view of important visual resources (i.e., ocean views). The degree of view obstruction may range from a determination that the project-related feature(s) would be easily overlooked by an observer, to a conclusion that an important public view would be substantially affected.

To assist in the evaluation of the potential for the proposed residence to substantially block an existing important public scenic view, computer-generated photo-

simulations were prepared by Hochhauser Blatter Architecture and Planning (2006) that depict the effects the proposed project would have on existing important public scenic views. Visual simulations of the proposed residence were prepared to evaluate potential impacts to important public scenic views as seen from the La Mesa Park “benches” and the southern lawn areas, and the eastern end of the Lighthouse Creek footbridge. The location of visual simulation view points are depicted on Figure 5.1-1.

La Mesa Park. Areas of La Mesa Park that provide views of the proposed project site and ocean are evaluated in this section to determine if the proposed project would have the potential to result in a significant visual impact. As described in Section 5.1.1, these areas include the “benches” area near the southern end of the park, and the southern portion of the park’s lawn area.

*“Benches” Area.* A photo providing a representative view of existing visual conditions as seen from the “benches” area is provided on Figure 5.1-4, and a simulation of post-project development visual conditions as would be seen from the “benches” area is provided on Figure 5.1-5. The proposed residence would be located approximately 50 feet directly south of the residence that is currently the southern-most structure on the east side of the project site driveway (see Figure 4.2-1). However, due to the view perspective provided from the “benches” area, most of the northern and eastern elevations of the proposed residence would be visible to persons in the “benches” area of the park (see Figure 5.1-5). This view perspective places the proposed residence prominently into the western portion of the view corridor provided from the “benches” area, and approximately 10 percent of the existing view of ocean water would be blocked.

A determination whether a 10 percent loss of existing ocean views would result in a “substantial” view reduction is subject to personal interpretation. However, due to the view angle provided from the “benches” area towards the project site, the proposed residence would be seen as a prominent visual feature within the existing view corridor.

The adverse visual effects of the proposed residence would also be increased due to the passive recreation opportunities provided by the “benches” area, as this portion of La Mesa Park provides ocean views that could be indefinite in duration. Although the proposed residence would be similar in size to other homes located along El Camino de la Luz, the amount of new structural development that would be placed into the important public scenic view corridor would be substantial. As a result, the proposed project would substantially block existing ocean views provided from the “benches” area, resulting in a significant visual impact.

The proposed project’s significant visual impact could be minimized by providing a revised project design that reduces the visual prominence of the residence within the view corridor. Moving the house footprint to the west on the project site would reduce its encroachment into the view corridor, however, the ability to implement this design change is limited by the need to provide a driveway that serves the residence and that



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Source: Hochhauser Blatter, 2006

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**Figure 5.1-4**

Existing Conditions: La Mesa Park “Benches” Area

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Source: Hochhauser Blatter, 2006

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**Figure 5.1-5**

Proposed Project Photo-Simulation: La Mesa Park “Benches” Area

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provides adequate project site ingress and egress. Another design modification option would be to reduce the height and/or overall size of the house so that it becomes less visually prominent within the view corridor. Such a change could be feasibly implemented by revising the design of the residence so that:

- The maximum height of the structure's eastern elevation (the down-slope side of the residence that would extend furthest into the view corridor) does not exceed 25 feet measured from existing grade. A 25-foot structure height is the minimum height typically required for the development of a two-story residence.
- The maximum height of the structure's west elevation (the uphill portion of the proposed building site) does not exceed 15 feet measured from existing grade. A 15-foot structure height is the minimum height typically required for the development of a one-story residence.

The 15- and 25-foot building height limitations accommodate the existing sloping conditions of the project site by allowing the eastern (downslope) elevation of the residence to be taller than the western (upslope) elevation. The proposed height limitations would require a 10-foot reduction of the proposed structure's eastern elevation, and a 5-foot reduction of the structure's western elevation. Reducing the building height would minimize the structure's encroachment into the important public scenic view provided from the "benches" area and would substantially reduce the visual prominence of the structure within the view corridor. Additional analysis of the feasibility and effectiveness of the proposed design modifications is provided in the Alternatives section of this EIR. The analysis of Alternative 2 indicates that a new residence on the project site that substantially complies with the suggested design criteria would reduce view obstruction impacts to the "benches" area view corridor to a less than significant level. This impact reduction results from a reduction in the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Alternative 2 would still require a slight modification to the depicted design to lower the height of the western elevation to 15 feet. Therefore, visual impacts to the important public scenic view provided by the "benches" area view corridor are **significant but mitigable (Class II)**.

The proposed project plans indicate that landscaping would be provided along the northern property line of the project site. The purpose of the landscaping would be to screen views of the proposed residence from the "benches" area, as well as other important public viewing locations in the project area. Proposed landscaping would include five 5-gallon myoporum bushes and two 15-gallon sycamore trees.

Myoporum bushes can achieve a height of up to 30 feet, and sycamore trees can reach a mature height of 50 -100 feet. While the proposed shrubs and trees would make an effective landscape buffer, they would also obtain mature heights that would result in

additional blockage of existing views through the “benches” area view corridor. Therefore, the proposed project landscaping would have the potential to result in a significant visual impact. Landscape-related visual impacts are **potentially significant but mitigable (Class II)** and can feasibly be reduced to a less than significant level by requiring that landscape screen materials be provided that would not reach a mature height that exceeds the height of the proposed residence.

*Southern Lawn Area.* A photo providing a representative view of existing public views as seen from the southern lawn areas of La Mesa Park is provided on Figure 5.1-6, and a simulation of post-project development visual conditions as would be seen from the southern lawn area of La Mesa Park is provided on Figure 5.1-7. As seen from the southern lawn area, the proposed residence would block approximately seven (7) percent of the existing ocean water view that is presently provided. The proposed structure would be visible from the southern lawn area, but would not dominate or appear to prominently extend into the existing view corridor. Therefore, as seen from the southern lawn area of the park, the proposed project would result in a **less than significant (Class III)** visual impact to an existing important public scenic view. After the implementation of the design revisions identified for impacts to visual conditions as seen from the “benches” area, view impacts to the southern lawn area would be even further reduced.

The photo-simulation provided on Figure 5.1-7 indicates that the potentially significant visual impacts resulting from the proposed residence diminish as the distance from the proposed project site is increased. In this instance, the southern lawn area view location is approximately 200 feet north of the “benches” area view location.

Similar to the “benches” area, landscape screening proposed by the project would have the potential to block existing ocean views as it matures. **Potentially significant but mitigable (Class II)** landscape-related visual impacts could be reduced to a less than significant level by requiring the use of landscape materials that would not reach a mature height that exceeds the height of the proposed residence.

Lighthouse Creek Footbridge. A photo providing a representative view of existing visual conditions as seen from a viewpoint at the eastern end of the Lighthouse Creek footbridge is provided on Figure 5.1-8, and a simulation of post-project development visual conditions as would be seen from the eastern end of the footbridge is provided on Figure 5.1-9. As seen from the eastern end of the footbridge, the proposed residence would be prominently visible in the western portion of the view corridor and approximately 15 percent of the existing ocean water view that is currently provided would be blocked. In addition, the second story of the proposed residence and the proposed chimney would be seen as slightly extending above the horizon (the apparent intersection of the ocean and sky).

From the eastern end of the bridge, the northern and eastern elevations of the proposed residence would be seen as encroaching into the view corridor, and the proposed residence would be a very prominent visual feature. The second story of the





Source: Hochhauser Blatter, 2006

**City of Santa Barbara**

*1837½ El Camino de la Luz*

**Figure 5.1-6**

Existing Conditions: La Mesa Park Southern Lawn Area



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Source: Hochhauser Blatter, 2006

**City of Santa Barbara**

*1837½ El Camino de la Luz*

**Figure 5.1-7**

Proposed Project Photo-Simulation: La Mesa Park Southern Lawn Area

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Source: Hochhauser Blatter, 2006

**City of Santa Barbara**

*1837½ El Camino de la Luz*

**Figure 5.1-8**

Existing Conditions: Eastern End of the Lighthouse Creek Bridge

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Source: Hochhauser Blatter, 2006

**City of Santa Barbara**

*1837½ El Camino de la Luz*

**Figure 5.1-9**

Proposed Project Photo-Simulation: Eastern End of the Lighthouse Creek Bridge

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house would be seen as extending above the horizon, which would adversely increase the visual prominence of the structure. Although it is not the primary purpose of the bridge to provide scenic views or passive recreation opportunities, views of the proposed residence as seen from the bridge could be extended in duration. Therefore, the proposed project would substantially block an existing important public scenic view provided from the eastern end of the Lighthouse Creek footbridge, resulting in a significant visual impact. Similar to views of the project site as seen from the “benches” area, **potentially significant but mitigable (Class II)** visual impacts to the important public scenic view provided from the eastern end of the footbridge could be feasibly reduced to a less than significant level by requiring project-related design changes that minimize the structure’s encroachment into the view corridor.

From the center of the bridge, the location of the proposed residence would appear to be more aligned with the existing residences along the east side of El Camino de la Luz. Although the structure would be visible in the western portion of the view corridor, it would not appear to prominently extend into the corridor (interacta, 2004)<sup>3</sup>. Existing vegetation located between the bridge and the project site would also act to screen views of the residence. Therefore, as seen from the center portion of the footbridge, the proposed project would result in a **less than significant (Class III)** impact to an important public scenic view.

Similar to the “benches” area, landscape screening proposed by the project would have the potential to block existing ocean views as it matures. **Potentially significant but mitigable (Class II)** landscape-related visual impacts could be reduced to a less than significant level by requiring the use of landscape materials that would not reach a mature height that exceeds the height of the proposed residence.

Meigs Road. Views of the project site provided from the southbound lane of Meigs Road are generally limited in terms of site visibility and duration. A visual simulation of the proposed residence as would be seen from Meigs Road at a view point located near the entrance drive to La Mesa Park (interacta, 2004) indicates that the proposed structure would be visible from Meigs Road, but would not prominently extend into the ocean view corridor that is provided across the park<sup>4</sup>. As a result, the proposed structure could be overlooked by automobile passengers and would not substantially block ocean views as seen by automobile passengers, bicyclists or pedestrians. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact to an important public scenic view as seen from Meigs Road.

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<sup>3</sup> A photosimulation of the proposed project as seen from the center of the Lighthouse Creek footbridge is included in the Initial Study (EIR Appendix A) as Exhibit C. Photo-simulation “WB2 - Bridge 2” provides a simulated view of the proposed project as it would be viewed from the center of the footbridge.

<sup>4</sup> A photosimulation of the proposed project as seen from Meigs Road is included in the Initial Study (EIR Appendix A) as Exhibit C. Photo-simulation “MP1 – Entrance to Parking Lot” provides the simulated view of the proposed project as it would be viewed from Meigs Road.



Other Views. A visual simulation of the proposed residence as would be seen from the beach located south of and adjacent to the project property (interacta, 2004) indicates that the upper portions of the proposed structure would be partially visible. However, the visible portions of the structure would be outlined against the sky and would not block an important public scenic view<sup>5</sup>. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact as seen from other public viewing locations in the project area.

Development of the proposed residence would have the potential to impair existing ocean views that are presently available to the house directly north of the project site. It is likely, however, that ocean views from the interior of the house would continue to be provided to the southeast, and ocean views would continue to be provided from deck areas that extend over Lighthouse Creek. Ocean views that are presently available to the home that is west of and adjacent to the project site would not be affected by the proposed project. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact as seen from private viewing locations in the project area.

***Threshold A-3.** Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially impairing the visual context of the area.*

The visual context of the project site is a somewhat degraded vacant parcel located in a predominantly built-out residential neighborhood. The project site is zoned “E-3/SD-3,” which allows the development of single-family residences. Existing residential development in the project area consists of one- and two-story single-family homes that are generally moderate in size. The eastern portion of the project site is presently overgrown with vegetation, which results in the appearance that the project site is part of the open space area provided by the adjacent channel of Lighthouse Creek.

For the comparison of the proposed project to this significance threshold, the project would have the potential to substantially impair the visual context of the area if the proposed development would introduce development features that are incongruous or that seem “out of place” when viewed from surrounding viewing locations. Examples of development that would seem “out of place” may include a proposed land use that has otherwise not been established in the project area, a residence that is demonstrably larger than other nearby homes, or architectural styles that are not typically found in residential neighborhoods.

The proposed residence is a land use allowed by the existing project site zoning, and the structure would be developed consistent with most zoning regulation

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<sup>5</sup> Photo-simulations of the proposed project as seen from the beach are attached to the Initial Study (EIR Appendix A) as Exhibit C. Photo-simulations “B1, B2 and B3” provide simulated views of the proposed project as it would be viewed from the beach area south of the project site.

requirements. A modification to allow construction of a new residence on a lot without the required 60-foot frontage on a public street would be required, however, such a modification would not impair the visual context of the project area.

The proposed project would result in the development of a new residence on a presently vacant parcel, and the residence would be visible within view corridors provided from the three view point locations identified by EIR (the “benches area and southern lawn area of La Mesa Park, and the footbridge over Lighthouse Creek). As depicted on Figures 5.1-4 through 5.1-9, the affected view corridors include important visual resources such as the Pacific Ocean and Santa Cruz Island. Other visual resources in the view corridors include the houses located along the east side of El Camino de la Luz, although the visibility of the houses in each of the three corridors varies. The existing houses are prominently visible from the “benches” area and the Lighthouse Creek footbridge. From the southern lawn area of La Mesa Park, however, the existing houses are predominately screened from view by dense vegetation. Views of the proposed new residence from the “benches” area and from the footbridge would be consistent with the visual context of the surrounding area because other houses are clearly visible from those view points. Although the existing homes are generally screened from public views provided from the southern lawn area of La Mesa Park, views of the proposed residence from the lawn area would be consistent with the urban context of the project area. Therefore, the use of the project site to develop a new residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The size of the proposed residence would generally be similar to other residences located along El Camino de la Luz, and the proposed architectural style would be compatible with the surrounding neighborhood. As a result, the proposed project would not substantially impair the visual context of existing important public scenic views and would result in a **less than significant impact (Class III)**.

#### **5.1.4 Cumulative Impacts**

As described on Table 4.3-1, several new single family residences have been proposed in the project area. In addition, several small residential building additions have been proposed in the area near the proposed project site.

The largest cumulative development project located in the vicinity of the proposed project site is a five-parcel subdivision adjacent to Washington Elementary School (2010 Meigs Road). This project could facilitate the development of five new residences located approximately 1,000 feet northeast of the proposed project site, and would convert a relatively small vacant parcel to an urban use. This cumulative development project would not adversely affect the important public scenic views associated with the 1837½ El Camino de la Luz residential project. Other cumulative development projects in the project area, including the projects at 1925 El Camino de la Luz, 157 La Jolla Drive, 2510 Mesa School Lane, and 2215/2305 Edgewater Way, would also result in the development of new residential units. Similar to the 2010 Meigs project, these additional cumulative development projects would not be visible from La

Mesa Park and would not affect the important public views associated with the proposed project. Other cumulative development in the project area would make relatively minor additions to existing structures and would not substantially change the visual character of the project area. Therefore, cumulative development in the project area would not result in cumulatively considerable impacts to existing important public scenic views and would not substantially contribute to cumulative aesthetic impacts. The proposed project's cumulative impacts are **less than significant (Class III)**.

### **5.1.5 Mitigation Measures and Residual Impacts**

Implementation of the following mitigation measures would reduce the aesthetic impacts of the proposed project to a less than significant level.

**AES-1. As presently designed, the proposed residence would have the potential to substantially obstruct existing ocean views provided from important public view points, including views provided from the “benches” area of La Mesa Park and the eastern end of the Lighthouse Creek footbridge.**

**AES-1a. Revised Project Design.** Revised project design plans shall be provided to the Single Family Design Board for review and approval. Any structure developed on the project site shall be located within the building envelope depicted on Figure 5.1-10. The envelope generally extends:

- South of the six-foot setback line along the project site's northern property line depicted on the project plans.
- West of the of the 86-foot contour depicted on the project plans.
- North of the of the 25-foot top of bluff setback line depicted on the project plans.
- East of the proposed 26-foot building setback from the project site's western property line, as depicted on the project plans.

The revised project plans shall implement the following design measures:

- 1a.1. The maximum height of the structure's east elevation shall not exceed 25 feet, as measured from existing grade (Figure 5.1-10).

- 1a.2 The maximum height of the structure's west elevation shall not exceed 15 feet measured from existing grade (Figure 5.1-10).
- 1a.3 The maximum building elevations for the structure's east and west elevations shall form a plane above the existing grade of the project site. The height of any structure located on the project site must be located within the building envelope and may not extend above the plane (Figure 5.1-10).
- 1a.4 The proposed residence design shall be revised to substantially reduce or eliminate the use of understory walls.

**AES-2. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.**

**AES-2a. Color Approval.** Proposed paint and material colors to be used on the residence shall be approved by the Single Family Design Board. Building colors shall consist of neutral or earth-tone colors. Subsequent color changes proposed for the residence shall be approved by the Single Family Design Board.

**AES-3 Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.**

**AES-3a. Landscape Plan Review.** Proposed landscape planting materials shall be approved by the Single Family Design Board. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature, will not attain a height that exceeds the height of the residence.

Implementation of mitigation measure AES-3a would also affect the selection of plant species used to revegetate disturbed areas on the project property. Proposed mitigation measure BIO-1 (see Summary Table 2.3-1) provides examples of native plants that may be used, including western sycamore and coast live oak. These tree species, however, would not comply with the requirements of measure AES-3a because they would achieve a mature height greater than the height of the proposed residence. The use of sycamore and oak trees in site revegetation efforts would have the potential to obstruct existing important public scenic views and result in a significant visual impact. Proposed mitigation measure BIO-1 has been modified to omit the use of sycamore and oak trees from the suggested plant list. These tree species do not exist on the project site and their elimination from the suggested plant list would not adversely affect the ability to adequately revegetate the project property.

**25'** Maximum Building Elevation (feet)  
Above Existing Grade\*

Not to Scale

## **5.2 GEOLOGY IMPACTS AND MITIGATION MEASURES**

This evaluation of geologic hazards associated with the 1837½ El Camino de la Luz project is focused on the potential for the proposed residence to be adversely affected by slope stability impacts. The analysis is based on the summaries, analysis and conclusions provided in the following three reports prepared by Dr. William Anikouchine:

- Peer Review of Geologic Analysis for a Project at 1837½ El Camino de la Luz, 2005.
- Geological Inspection Trench at 1837½ El Camino de la Luz, 2009.
- Geological Investigation of Slope Stability at 1837½ El Camino de la Luz, 2011.

The 2005 report provided a review and summary of 17 reports and other correspondence regarding previous geological investigations conducted for the proposed project and project site. The 2005 report also provided an analysis of existing slope stability conditions at the project site. As described in more detail below, the 2005 report concluded that the slope in the immediate area of the project site is stable. The 2005 report is provided in its entirety as an attachment to the Revised Initial Study (2005) prepared for the proposed project (Appendix A).

The 2009 report was prepared to determine if a previously reported bedding plane fracture that had the potential to result in significant slope stability impacts actually existed on the project site. As described in more detail below, the 2009 report concluded that the previously reported bedding plane fracture does not exist on the project site. The entire 2009 report is provided in Appendix B of this Revised EIR.

The 2011 report was prepared to evaluate the potential for the proposed project to be adversely affected by slope stability impacts. As described in more detail below, the 2011 report concluded that the project site would be stable after the development of the proposed project, and that although unlikely to occur, potentially significant slope stability impacts that could result from excessive increases in groundwater levels beneath project can be reduced to a less than significant level with the implementation of a proposed mitigation measure to provide an adequate storm water drainage system on the project site. The entire 2011 report is provided in Appendix C of this Revised EIR.

### **5.2.1 Setting**

The 23,885 square foot project parcel is located at the top of an east-west trending bluff adjacent to the Pacific Ocean. At the project site, the height of the bluff varies from approximately 70 to 90 feet above sea level, while the proposed building site has an elevation of approximately 100 feet. The southeastern corner of the project parcel

contains the Lighthouse Creek drainage channel. The banks of this incised creek channel are very steep and the bottom of the channel is approximately 15-20 feet below top of the creek's western bank. The creek discharges to the Pacific Ocean down a steep slope that cuts the bluff face.

The project site is underlain by the Monterey Shale formation. This formation is often thinly bedded and can be highly fractured. Bedding planes in the formation that slope seaward are prone to block sliding and the landward retreat of the bluff face. As described in more detail below, the orientation of bedding planes at the project site have a somewhat different orientation and a block slide type of sea cliff failure is not the type of failure most likely to affect the project site.

In the Santa Barbara area, average rates of seacliff retreat can range from approximately three to ten inches per year (City of Santa Barbara, 1979). Based on a review of historic aerial photos, it is estimated that the average annual rate of seacliff retreat at the project site is on the order of four inches per year (Anikouchine, 2005).

On February 14, 1978, a large landslide, known as the El Camino de la Luz slide, occurred along the ocean bluff west of the proposed project site. The slide affected an area approximately three acres in size and destroyed two homes. The eastern edge of the main portion of the slide was approximately 200 feet west of the proposed project parcel. The probable cause of the slide was determined to be the seaward component of dip of the Monterey formation strata and surface water that was allowed to permeate the ground surface in the slide area. The added weight of the water and the lubrication it provided caused the shear strength of the weakest bedding plane to be exceeded and fail (Anikouchine, 2005).

**Previous Geologic Investigations.** A peer review of 17 separate reports that evaluated the geologic conditions at and adjacent to the proposed project site was conducted by Dr. William Anikouchine (2005). The project-related geologic reports were prepared between 1971 and 2002 by ten different consulting firms and consulting geologists. Based on the review of the various geologic reports and field investigations, Dr. Anikouchine concluded that the reports prepared by CFG Consultants (1996) and Fisher (2001, 2002) adequately characterized the geological conditions at the project site. A summary of the on-site geological conditions as described by those reports is provided below.

The geology of the project site is described as terrace sand lying upon shale bedrock. The sand is reported to underlie the paved portion of the project site and to be five to six feet thick. Fill material occurs elsewhere on the project site. An angular unconformity exists at the mouth of the Lighthouse Creek channel in the southwest corner of the project parcel. This feature separates the steep dipping strata to the east of the project site from the more gently dipping strata found along the beachfront of the project parcel.

The seacliff at the south side of the project site has a compound slope that is generally convex upward. The base of the cliff slopes 60 to 80 degrees, and above the reach of the waves, the slope of the cliff is 40 degrees. At the top of the cliff, the slope is approximately 28 degrees.

Fisher (2001) identified the top of the bluff as defined by the California Coastal Commission<sup>1</sup>. The top of the bluff on the project site is identified on the proposed project site plan (Figure 3.3-1). Fisher also reported that the rate of seacliff retreat (the landward erosion of the bluff) at the project site is approximately four inches per year. This is similar to the conclusion by Norris (1988), who estimated the rate of seacliff retreat based on the review of aerial photographs taken in 1943, 1954 and 1986. Fisher also reported that based on a review of aerial photos, the erosion at the top of the slope of the bluff has been negligible over the past 65 years.

**Bluff and Creek Bank Setbacks.** The most commonly assumed design life for new development generally ranges from 50 to 100 years, with 75 years being a common value. Therefore, a setback from the edge of the ocean bluff that would allow a structure to exist safely for 75 years is commonly required. The reasoning behind establishing a bluff edge setback based on the design life of a structure is that by the time the bluff retreats sufficiently to threaten the structure, the structure is obsolete and ready to be demolished for reasons other than encroaching erosion (California Coastal Commission, 2003). Based on a seacliff retreat rate of four inches per year, over a period of 75 years it can be expected that the top of the bluff at the proposed project site will retreat (move northward) approximately 25 feet. Therefore, a 25-foot building setback from the current top of the bluff was recommended by Fisher. The proposed 25-foot setback line from the present bluff top is depicted on the proposed project site plan (Figure 3.3-1). A similar 25-foot setback from the top of bank for the incised Lighthouse Creek channel has also been proposed.

**Geologic Hazards.** Landslides involving the cliff on the project parcel are reported to have occurred in the 1970's. Soil slumps have also occurred near the edge of the cliff. The scarp left by one of these slumps is still visible just below the base of the wooden stairs leading to the concrete-lined swale in western portion of the project site. Another landslide at 1839 El Camino de la Luz, west of the proposed project site, occurred in November 1995. This slide did not alter the form of the upper edge of the cliff.

Anikouchine, along with others, identified evidence of a large landslide located in the southeast corner of the project property. The direction of movement for this slide was

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<sup>1</sup> The Coastal Commission's definition of "bluff edge" states: "In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step-like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to the cliff edge..."(California Code of Regulations, Title 14, Section 13577(h)(2).



to the southwest, nearly perpendicular to the dip direction of the Monterey formation strata. This failure might have been exacerbated by the removal of lateral support by erosion in Lighthouse Creek.

Soil creep (the slow down slope movement of soil) is reported to be a minor concern at the project site. Previous geologic investigations of the project site suggested that the use of caissons set into the shale bedrock and the control of runoff water would minimize the effects of soil creep.

The peer review of the previous geologic investigations noted several disagreements between the various reports regarding conclusions pertaining to the geologic conditions of the project site. These disagreements included discrepancies regarding the reporting of the orientation (strike and dip) of the Monterey formation strata at the project site and conclusions regarding the ability of the Monterey formation at the project site to resist erosion. Another area of disagreement is in regard to the presence of an open bedding plane fissure on the project site. Smith (1980) indicated that he observed the fissure from the beach and projected it northward. The building envelope recommend by Smith is located east of the fissure where the bedrock was found to be “extremely competent and of high strength.” CFG Consultants (1996) indicates that the “open bedding plane fracture” is actually a one-inch thick asphaltum bed. In his review of these reports, Anikouchine concurred with the findings by CFG Consultants, except in the matter of the existence of an open bedding plane fracture versus an asphaltum bed. Heavy vegetation prohibited examination of the ground surface at the building site, precluding the ability to confirm previous determinations.

The original Draft and Proposed Final EIRs prepared for the proposed project recommended the implementation of a mitigation measures to address the issue of the previously reported bedding plane fracture on the project site. In their consideration of the original Proposed Final EIR and the proposed project, however, the Planning Commission requested that additional information regarding the presence or absence of the fracture be included in the EIR, and if necessary, an assessment of the potential for the fracture to result in a significant project-related slope stability impacts also be addressed. Additional information regarding the suspected bedding plane fracture and the potential for the project site to be adversely affected by slope stability impacts is provided in Section 5.2.3 below.

### **5.2.2 Impact Significance Thresholds**

A project would have the potential to cause a significant geologic hazard if it would result in:

- A. Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic sea waves.
- B. Exposure to or creation of unstable earth conditions due to geologic or soil

conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.

- C. Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

Potential impacts related to seismic hazards under criterion “A” were evaluated by the Revised Initial Study prepared for the proposed project (ENV2002-00214). That evaluation concluded:

“The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefaction) and the site is well above the tsunami run-up area. Therefore, there would be no impacts from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a *less than significant impact*.”

Therefore, potential seismic hazard impacts of the proposed project would not be significant and no additional evaluation of threshold of significance criterion “A” is required.

### **5.2.3 Impact Evaluation**

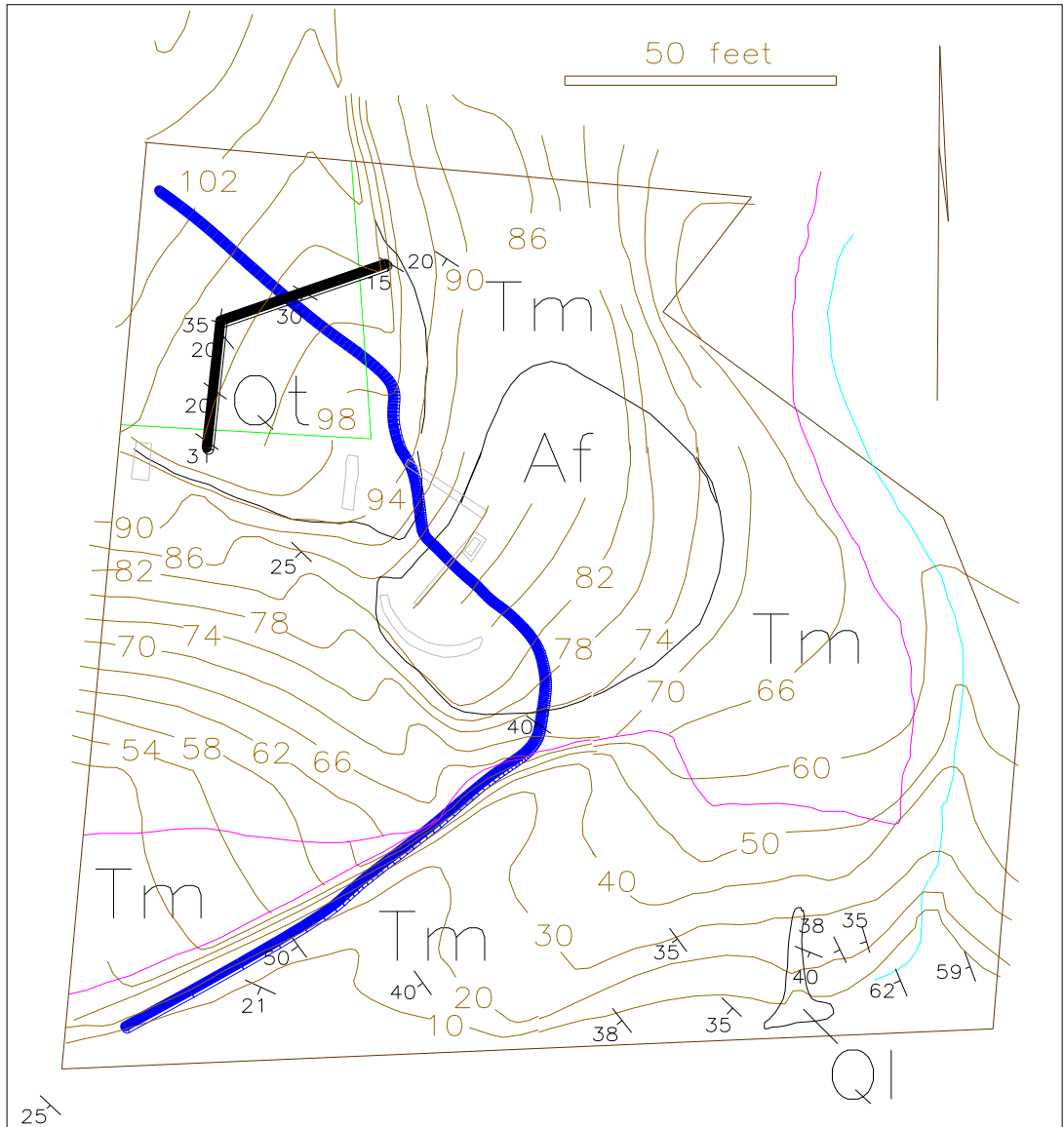
***Threshold B.*** *Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.*

#### **Landslides**

Bedding Plane Fracture Investigation. In response to direction provided by the Planning Commission, an additional geological investigation of the project site was conducted in 2009 by Dr. Anikouchine to determine if the suspected bedding plane fracture that had been reported by others existed on the project site. It was important to determine if the fracture is present because previous reviews of the project site geology indicated that the fracture could be a plane of weakness along which a block slide slope failure could occur, and that such a block slide could involve movement of all of the material west of the fracture, potentially resulting in a significant impact to the proposed project.

To confirm the presence or absence of the bedding plane fracture, a geologic inspection trench was developed on the project site. The location of the trench is depicted on Figure 5.2-1. The trench was excavated using a backhoe and consisted of two segments: an east-west segment 45 feet long, and a north-south segment 31 feet long.

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**Map of the parcel at 1837½ Camino de la Luz. The position and orientation of the geologic exploratory trench is shown by the heavy black line. The trench is in two segments. The east-west segment is 45 feet long. The north-south segment is 31 feet long. Both segments are approximately 2½ feet wide by 8 feet deep. The heavy blue line marks the expected position of the subcrop of the Monterey formation bedding plane that was encountered at the bottom of the trench.**

Source: Anikouchine, 2009

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Both segments were approximately 2.5 feet wide and eight feet deep. The trench was excavated to a depth that encountered a subcrop of Monterey formation strata. The walls of the trench were inspected and mapped, and rock samples were collected from the trench for laboratory testing. Additional information regard the characteristics of rock and soil observed in the trench is provided in Appendix B.

Inspection of the trench concluded that there was no evidence of the suspected bedding plane fracture. Therefore, the proposed building site would not be affected by the type of block slide slope failure previously described by other investigators. No springs or shallow groundwater were encountered in the trench, which indicates that groundwater levels are not located near the ground surface and it is unlikely that the project site would be affected by liquefaction.

As part of the 2009 site investigation, the rock strata at the base of the coastal bluff where the open bedding plane fracture was reported to exist were inspected. It was observed that a seam of fissile (capable of being split along the bedding planes) shale approximately 1.5 inches thick was interbedded between strata of thick marl (calcareous and siliceous shale). The marl is more resistant to wave erosion than the shale, and as a result, the shale strata had been scoured out to a depth of approximately one inch. Based on this evidence, it appears that the wave scour of the interbedded shale had been misinterpreted as an open fracture or a petroliferous seam by previous investigators.

The geologic inspection trench was excavated, inspected and backfilled in a single day. The soil excavated from the trench was moistened, placed into the trench and compacted to approximately 95 percent relative compaction. The trench area was replanted with the vegetation that had been removed from the east and south ends of the trench segments, and other portions of the trench were repaved with asphalt, similar to pre-inspection conditions. Curbs that were disturbed by the trenching process were reconstructed with concrete.

The 2009 site investigation concluded that strata under the project site dip (the angle the strata forms with a horizontal plane) southward and that the strike (the compass direction at a right angle to the dip) of the strata is not parallel to the east-west trend of the toe of the coastal bluff. Due to this orientation, the rock strata that form the coastal bluff at the project site are buttressed to west. Conditions similar to this have resulted in failures of the coastal bluff elsewhere along the shoreline in the project area. The 2009 site investigation concluded that additional analysis would be required to evaluate the slope stability of the project site.

As recommended by the 2009 geological investigation, an additional slope stability analysis of the project site was conducted by Dr. Anikouchine in 2011. The results of that study are summarized below and the complete report is provided in EIR Appendix C.

Additional Slope Stability Analysis. As part of his review of the proposed project conducted in 2005, Dr. Anikouchine evaluated the stability of the project site bluff. This analysis evaluated the overall stability of the slope based on its topographic profile, bedding plane orientation, shear strength characteristics of the Monterey formation, and other factors. That evaluation indicated that the entire slope of undisturbed Monterey shale is stable under conditions of a severe earthquake. The results of the 2005 slope stability analysis are attached to the Revised Initial Study prepared for the proposed project (Appendix A). The 2005 slope stability analysis concluded that the project site bluff was stable, however, site-specific data regarding the shear strength and other characteristics of rocks on the project site were not available when the analysis was prepared.

In response to the recommendation provided by Dr. Anikouchine in his 2009 report, an additional slope stability evaluation of the project site was completed in 2011. The objective of the 2011 slope stability analysis was to supplement the previous slope stability evaluation by using site-specific laboratory testing data obtained from rock samples collected during the 2009 site investigation. The 2011 analysis evaluated the project site conditions to determine the type of slope failure mechanisms that could affect the project site, and based on the results of that analysis, evaluated the likelihood for a slope failure to occur. Four potential types of slope movement were evaluated:

- A plane failure down a single bedding plane.
- A wedge-type failure on two intersecting planes, such as a bedding plan and a fracture.
- A toppling failure of nearly vertical beds or jointed slabs of bedrock.
- A circular failure where only unconsolidated sediment or highly fractured rock form the bluff.

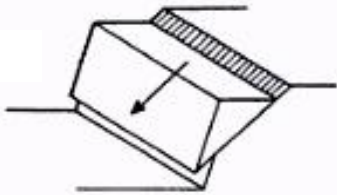
Each of the slope movement mechanisms described above have occurred in the Santa Barbara County coastal bluffs and, the type of rock movement associated with each type of failure mechanism is depicted graphically on Figure 5.2-2.

The 2011 slope stability evaluation included an inspection of the project site and surrounding bluffs to assess the following conditions that could contribute to slope instability:

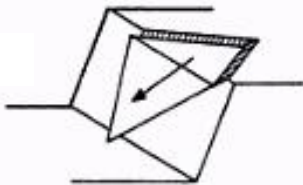
- The attitude of the Monterey formation strata in the bluff face and on the wave-cut platform fronting the bluff at the project parcel.
- Persistent fractures located in the bluff or wave-cut beach terrace.
- Evidence of previous slope failures in the bluff located at the project site and near the project site.
- Bedrock exposures were inspected for asperities in the bedding planes and in fracture surfaces. Asperities are irregularities in the bedding planes such as



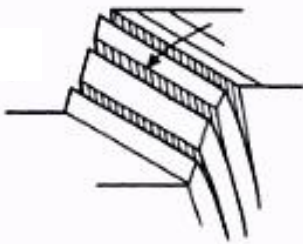
**Circular Failure**



**Plane Failure**



**Wedge Failure**



**Toppling Failure**

Source: Modified from Anikouchine, 2011



roughness, which can be measured in millimeters; and waviness, which can be measured in inches or feet.

The 2011 slope stability analysis also considered the effects of placing additional weight (a residential structure) on the project site. The weight of a new residence was estimated based on assumptions regarding the largest structure that could reasonably be developed on the project site<sup>2</sup>. The 2011 slope stability analysis evaluated existing and proposed project site conditions to derive a slope stability “factor of safety.” A factor of safety less than 1.0 indicates unstable conditions, while a factor of safety greater than 1.5 indicates stable slope conditions under static conditions. A factor of safety between 1.0 and 1.5 indicates “metastable” conditions. A factor of safety of 1.5 or greater under static conditions is generally required for a project site to be considered suitable for a proposed development and the issuance of a building permit. A factor of safety of 1.1 or greater is generally required for the project site to be considered stable during an earthquake (pseudo-static conditions).

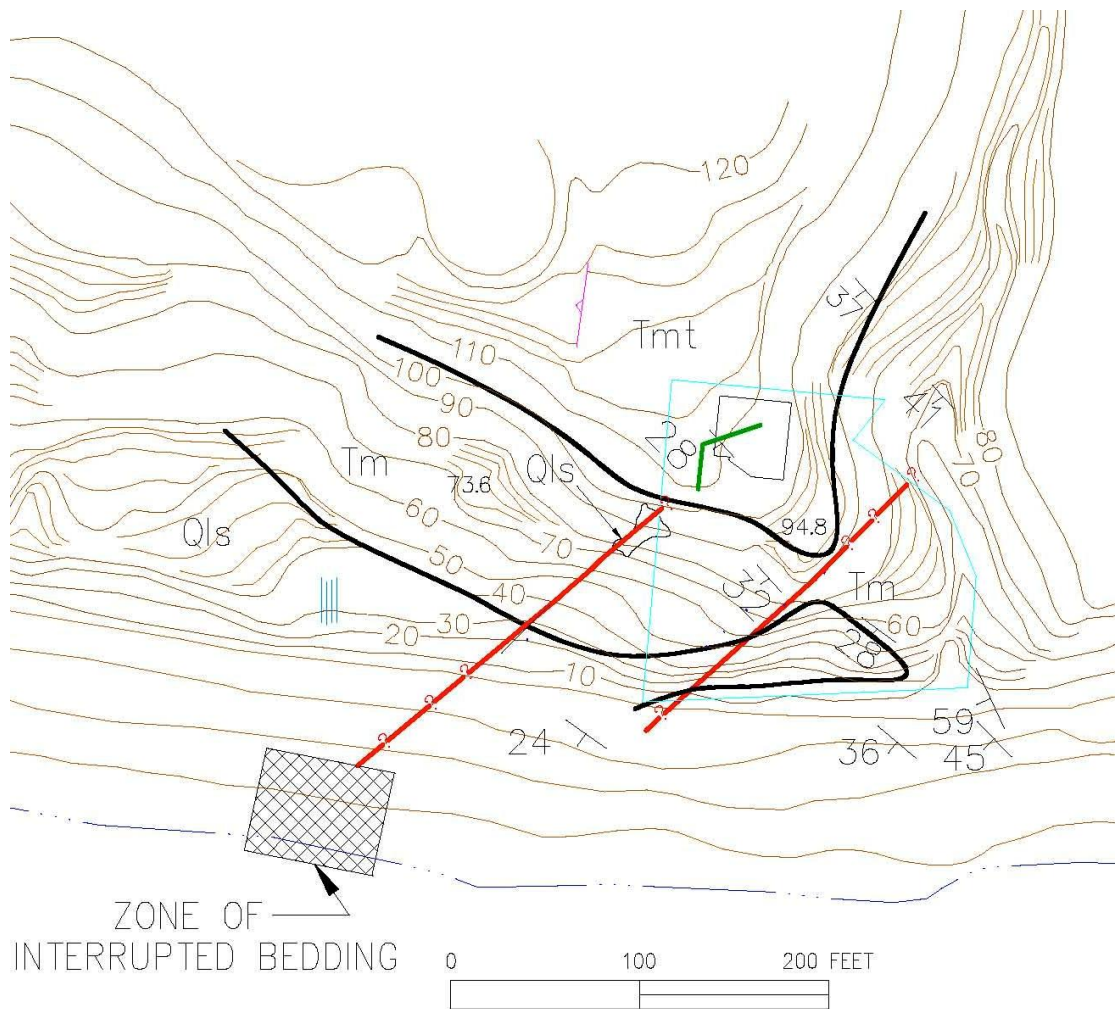
Geologic conditions at and adjacent to the project site pertinent to the evaluation of potential slope stability impacts are depicted and described on Figure 5.2-3. In summary, the 2011 slope stability analysis identified two prominent fractures cutting the bluff in the study area: one of the fractures is located on the project site; the second fracture is visible in an area to the west of the project parcel and may also extend onto the project site. It is possible that a zone of interrupted bedding that was observed on the beach west of the project site is a seaward extension of the fracture that was identified to the west of the project site.

*Plane Failure.* The 2011 slope stability analysis evaluated the potential for the project site to be affected by a plane-type slope failure. That analysis evaluated factors that could result in a plane failure, including bedding plane orientation (strike and dip), topography of the project site and surrounding areas, characteristics of on-site bedding planes (e.g., rock material type and asperities), and data regarding the characteristics of the rock formations that were obtained from samples taken from the investigation trench developed on the site in 2009. The analysis also included an estimate of the additional weight that would be placed on the bluff by the proposed project, and evaluated the slope stability impacts of an earthquake (pseudo-static analysis). The analysis of these conditions concluded that the project site bluff would be stable after the development of a residence on the project site and during a seismic event.

*Wedge Failure.* Figure 5.2-4 depicts the proposed project site, the area approximately 600 feet west of the project site, and the outline of recent and historic landslides that have occurred in the project area. The area affected by the 1978 El Camino de la Luz slide is outlined in the central portion of the figure. The ancient

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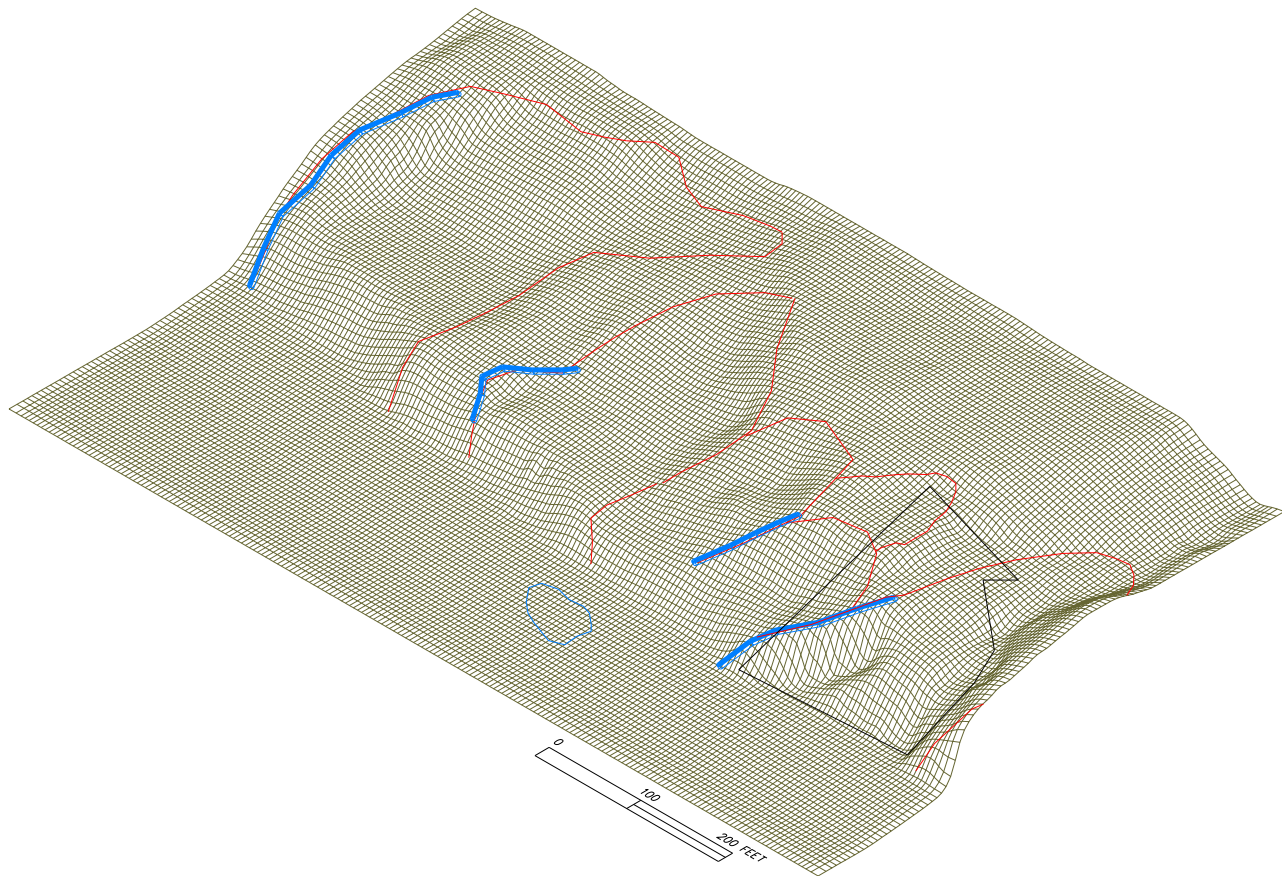
<sup>2</sup> The weight of a new residence was estimated by assuming the development of a structure with a building footprint of 2,000 square feet, which is similar to the total floor area of the proposed residence (1,942 sq. ft.). The analysis assumed a project-related building load of 100,000 pounds.



Topographic map showing geological data used in the assessment of the potential for slope failure at 1837½ Camino de la Luz. The parcel boundary is outlined with a thin cyan line. The heavy black lines are contacts between relatively undisturbed Monterey formation beds (Tm), the unconsolidated materials capping the elevated marine terrace (Tmt), and landslide debris (Qls). The heavy red lines mark the location of fractures seen cutting the bluff. They are dashed and queried where uncertain. Bedding attitudes are shown by strike and dip symbols and dip values in degrees. The light blue lines are drainage tubes extending towards the beach. The proposed building footprint is outlined with a thin black line. The geologic exploration trench is shown by a heavy green line.

Source: Modified from Anikouchine, 2011

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**Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the northwest. The project parcel boundary is shown by the black outline in the lower right corner of the figure. The lowest plane represents sea level. North is parallel to the short axis of the lower plane. The mesh size is 5 feet. The landslide features are shown as red lines and include the Camino de la Luz landslide of February 14, 1978, which lies west of the zone of interrupted bedding is indicated by the closed blue figure on the beach. The heavy blue lines represent steep bluffs that might be fracture planes.**

Source: Modified from Anikouchine, 2011

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slide on the southeast portion of the project parcel is depicted on the right side of the figure. Steep bluffs are depicted on the Figure by blue lines. The steep bluffs are likely the result of slope failures caused, in part, by fractures on the west side of individual wedge-type slope failures.

Based on the geological conditions of the project site and surrounding area, the 2011 slope stability analysis concluded that a wedge-type failure would be the type of slope movement most likely to affect the project parcel. The ancient landslide in the southeast corner of the project parcel and the El Camino de la Luz slide of 1978 also appear to be wedge-type slope failures.

The fracture depicted on Figure 5.2-3 as being located just west of the project parcel has the potential to cause a wedge-type slope failure, similar to other landslides that have occurred in the project area. A wedge-type failure affecting the project site would most likely occur at the intersection of a bedding plane having the least shear strength on the eastern side of the project site and the fracture identified west of the site (refer to Figure 5.2-5). The 2011 slope stability analysis evaluated the fractures located on and near the project site and assessed the potential for those fractures to result in a wedge-type failure. That analysis determined that after the implementation of the proposed project, the project site coastal bluff would have a slope stability factor of safety of 2.6, which indicates stable slope conditions. Therefore, the fractures that have been identified on and near the project site would not result in a significant slope stability impact.

The wedge failure slope stability analysis for the project site was repeated to evaluate what effects rising groundwater levels caused by winter storms may have on project site slope stability conditions. This additional analysis was conducted to provide a very conservative evaluation of potential slope stability impacts, and because it is thought that the large El Camino de la Luz slide of 1978 was caused by an increase in ground water pressure resulting from excessive uncontrolled storm water runoff with consequent infiltration into a pre-existing slide mass. It should be recognized, however, that the geologic conditions at the project site are substantially different from the conditions that contributed to the 1978 El Camino de la Luz landslide. The slope failure that occurred in 1978 affected a pre-existing slide mass, while the geologic substrate at the proposed project site is intact marl strata of the Monterey formation. Furthermore, the slope stability analysis conducted for the project site indicates that the site is stable, which is supported by the fact that the project site remained stable when the bluff area to the west failed in 1978.

The additional slope stability analysis showed that the stability of the coastal bluff is more sensitive to the amount of water infiltrating into the ground than the weight of a structure placed on the site. The possibility of a wedge-type slope failure at the project site is increased when the groundwater level is increased. Groundwater levels at the project site are controlled by a variety of factors, including topography, rainfall amounts and intensity, evapotranspiration by vegetation, and the manner in which groundwater

moves through bedrock material. Additional information regarding how these factors affect groundwater levels at the project site is provided in Appendix C.

Based on the absence of observed seeps or springs in the project site bluff, or evidence of seeps or springs such as plant growth or water-stained rock, it is likely that groundwater beneath the project site is located at or near the base of the bluff (sea level). The effects of increasing groundwater levels on the stability of the project site coastal bluff are summarized on Tables 5.2-1 and 5.2-2. The tables indicate that a one-foot

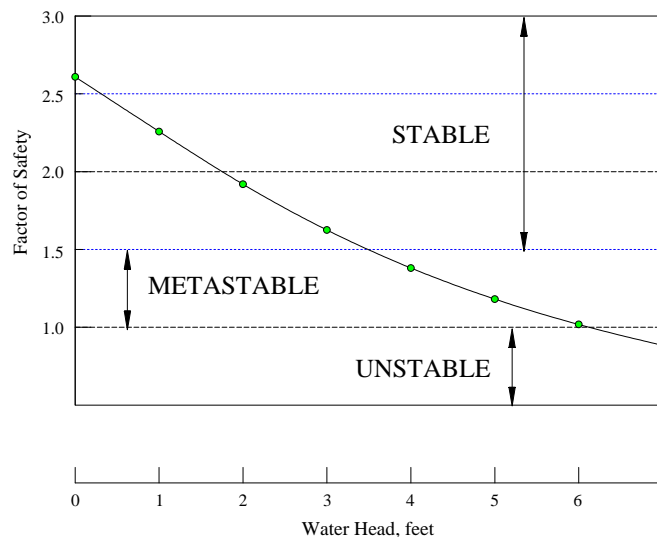
**Table 5.2-1**  
**Effects of Groundwater Levels on Project Site Slope Stability**

Increase in Groundwater Head (ft) (1)	Calculated Slope Stability Factor of Safety
0	2.609
1	2.258
2	1.919
3	1.625
4	1.381
5	1.181
6	1.018
7	0.883

Source: Anikouchine, 2011

- (1) The increase in groundwater head is an increase in the elevation of the ground water surface. It is expected that groundwater levels at the project site are generally at or near the base of the coastal bluff.

**Table 5.2-2**  
**Slope Stability Dependence on Groundwater Levels**



Source: Anikouchine, 2011



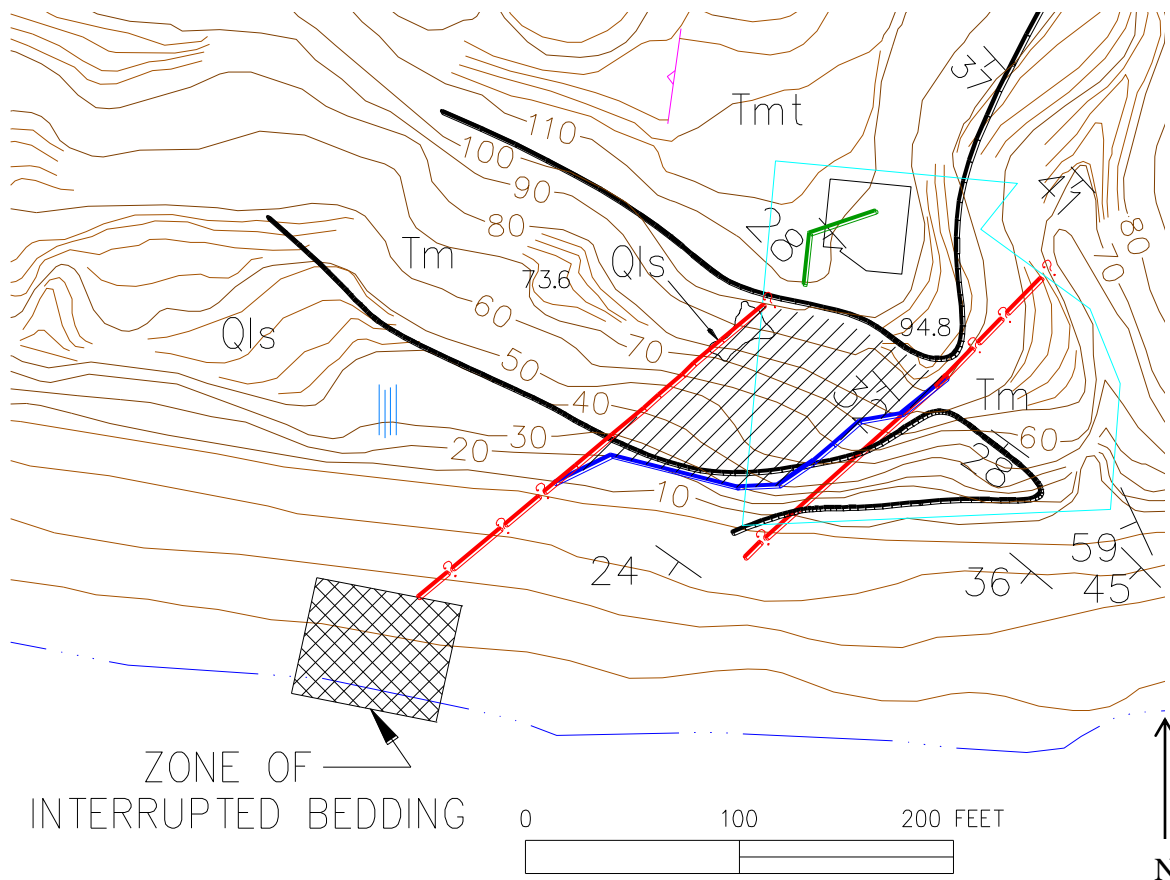
increase in the groundwater level at the project site would decrease the project site slope stability factor of safety from 2.6 to 2.3, which is still a stable slope condition. If groundwater levels were to increase by more than three feet, the slope stability factor of safety would drop below 1.5, indicating a potentially unstable slope condition.

The potential for groundwater levels at the project site to increase sufficiently to result in unstable slope stability conditions was evaluated by the 2011 slope stability analysis. In summary, the analysis concluded that only a small portion of rain water actually infiltrates into the ground to become groundwater. For example, based on annual average precipitation in the project region (approximately 18 inches per year), it is estimated that about five inches of that water is stored as groundwater, and that a 100-year storm event would be expected to result in a four-inch increase in groundwater levels. Additional information regarding water infiltration and historic storm conditions in the Santa Barbara area is provided in Appendix C. Therefore, it is unlikely that a major storm or that annual rainfall conditions would raise groundwater levels beneath the project site sufficiently (i.e., more than three feet) to result in an unstable slope stability condition.

Although the 2011 slope stability analysis indicates that the project site bluff is stable, an analysis of how a wedge-type failure, should one occur, might affect the project site and proposed residence was provided. This analysis was conducted because the fracture to the west of the project site dips steeply enough to act as a potential release plane for a plane failure (see analysis provided above) as well as acting as part of a large wedge failure. For this analysis, it was assumed that the east side of a wedge failure would be formed by a bedding plane having low shear strength. The bedding plane that crops out at the lowest elevation of the bluff would be under the maximum stress caused by the weight of the overlying wedge block material. The location of the Monterey formation bedding plane most likely to meet these requirements is depicted as the heavy blue line on Figure 5.2-5. A potential wedge failure block could exist between the lowest exposed Monterey formation bed (the blue line on Figure 5.2-5) and the fracture to the west of the project site that is also depicted on Figure 5.2-5. The fracture to the west does not appear to extend across the proposed building envelope and it was not observed in the geologic inspection trench that was developed on the project site. Furthermore, there is no surface expression of the fracture on the project parcel. Slight soil creep was observed in the southeast corner of the proposed building envelope, but no tension fracture release surface appears to transect the top of the wedge. Based on the conditions described above, Figure 5.2-5 depicts the largest wedge block area that would likely impact the project site. As depicted on Figure 5.2-5, the possible wedge failure area could adversely affect the project site, but does not include the proposed building footprint.

In conclusion, the wedge failure analysis concluded that the project site is stable; it is unlikely that increases in groundwater levels would adversely affect the stability of the project site; and even if a slope failure were to occur, it is unlikely that the proposed building pad would be affected such that a catastrophic failure of the proposed residence

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The heavy red lines mark the location of fractures seen cutting the bluff. The heavy blue line shows the outcrop of the lowest bed in the Monterey formation that intersects the fracture in the bluff just west of the subject parcel. The proposed building footprint is outlined with a thin black line. The geologic exploration trench is shown by a heavy green line. The kinematically possible wedge failure area is depicted as the hatched area between the western fracture (heavy red line) and the bedding outcrop (heavy blue line). Hatching is limited to the observable extent of the fracture.

Source: Modified from Anikouchine, 2011

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would result. The analysis does emphasize, however, the importance of controlling runoff on the project site to minimize the infiltration of water into the bluff, because the addition of excessive amounts of water and resulting increase in groundwater pressure has the potential to result in a slope failure impact. This potentially significant impact can be feasibly reduced to a less than significant level by installing and maintaining an adequate storm water runoff system on the project site, and limiting landscape irrigation to the maximum extent possible.

*Circular and Toppling Failure.* The 2011 slope stability analysis evaluated the potential for the project site to be impacted by circular and toppling slope stability failures, and concluded that those types of slope movement mechanisms are unlikely to affect the site. A circular failure would be unlikely because such a slope failure could only occur in the unconsolidated material overlying the Monterey strata that underlies most of the project site, or in landslide debris that lacks the cohesion of intact rocks. The unconsolidated material at the project site is only about seven feet thick, therefore, only minor material movement at the project site would be subject to this type of slope failure. A toppling failure typically occurs in rocks having fractures or bedding planes that are dipping nearly vertically, and such a condition does not exist at the project site.

Conclusion. The 2011 slope stability analysis concluded that the project site coastal bluff would remain stable after the development of the proposed residence, and the slope would remain stable under earthquake conditions. The probability of a wedge-type slope failure at the project site would be increased if storm water runoff and/or landscape irrigation water is allowed to infiltrate into the ground in amounts sufficient to result in a substantial rise in local groundwater levels. However, it is unlikely that increases in groundwater levels resulting from major storms, annual rainfall and/or landscape irrigation would be sufficient to result in a significant slope instability impact, especially if storm water runoff is managed in a manner to convey water off of the project site in a controlled manner, and landscape irrigation is minimized. Therefore, project-related slope stability impacts would be a **significant but mitigable (Class II) impact**, and can be reduced to a less than significant level by implementing proposed mitigation measure GEO-1a and other mitigation measures identified by the Revised Initial Study.

Based on a review of project site topography, it appears that most project site runoff is presently directed to Lighthouse Creek, and some of the project site runoff sheet flows over the coastal bluff. The proposed project site drainage system would implement the requirements of EIR mitigation measure GEO-1a by directing drainage from the proposed building pad to Lighthouse Creek. Providing an on-site drainage system would also have the beneficial effect of reducing erosion that may result from existing runoff discharges over the creek bank and coastal bluff. Initial Study mitigation measure BIO-1 requires the use of drought tolerant landscaping on the project site, and mitigation measure BIO-3 requires that any drip irrigation system installed on the bluff be removed after two full seasons of plant growth. Similarly, EIR mitigation measure GEO-1a prohibits the long-term use of an irrigation system on the project site.

**Sea Cliff Retreat.** The 2011 slope stability analysis evaluated how sea cliff retreat caused by marine erosion could affect the stability of the project site. This analysis was also conducted to verify the adequacy of the proposed 75-year project life/sea cliff setback line that was established by Fisher (2001) and that is depicted on Figure 3.3-1 (Site Plan) of this EIR. The complete sea cliff retreat analysis is provided in EIR Appendix C and the conclusions of the analysis are summarized below.

The analysis of how sea cliff erosion could affect the proposed project is based on the methodology used by the Coastal Commission (California Coastal Commission, 2003). This methodology considers the rate of marine erosion and existing slope stability characteristics. For this analysis, the City's 75-year project life standard was also used. Dr. Anikouchine concluded that marine erosion would cause the slope stability factor of safety at the project site to drop below 1.5 (indicating potentially unstable slope conditions) when marine erosion has proceeded 60 feet shoreward from existing conditions and formed a bluff 60 feet high. As depicted on Figure 5 of Appendix C, the existing project site bluff face is approximately 40 feet in height. With a current average rate of sea cliff erosion of approximately four inches per year, potentially unstable bluff conditions would be expected to occur in about 180 years. Based on these estimates, the 180-year period for potentially unstable slope conditions to develop is almost 2.5 times the 75-year project life standard used by the Coastal Commission. Therefore, seacliff retreat impacts would be **less than significant (Class III)** and no additional mitigation measures are required.

**Subsidence.** Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. Proposed mitigation measure GEO-2a requires that the proposed project provide an appropriate structure foundation. With the implementation of the mitigation measure GEO-2a, potential subsidence impacts **are significant but mitigable (Class II)** and can be feasibly reduced to a less than significant level.

**Expansive Soils.** An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact can be reduced to a less than significant level by the use of a caisson foundation rather than footings. Proposed mitigation measure GEO-2a requires that the proposed project provide an appropriate structure foundation and that the foundation be approved by a licensed Engineering Geologist or Geotechnical Engineer. With the implementation of mitigation measure GEO-2a, potential expansive soil impacts **are significant but mitigable (Class II)** and can be feasibly reduced to a less than significant level.

**Threshold C.** *Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.*

Implementation of the proposed project would require only minor alterations to the topography of the project site to construct the proposed building foundation, driveway and to collect and convey runoff water. The average slope of the proposed building area is approximately 20%, however, the amount of grading that has been proposed would not be extensive. The minor amount of ground disturbance that would result from the proposed project would be relatively minor, however, due to the proximity to Lighthouse Creek, project-related ground disturbance would have the potential to result in a significant short-term erosion impact. This potential impact would be minimized by preparing and implementing an on-site erosion control plan that implements the requirements of Building and Safety Division's Erosion/Sedimentation Control Policy and the City's Storm Water Management Program. Compliance with existing policy requirements would prevent short-term erosion-related impacts from becoming significant and no additional mitigation measures would be required. Therefore, potential grading impacts would be **less than significant (Class III)**.

Runoff water on the project site would be collected by a series of catch basins and conveyed by underground pipes to a proposed discharge point located in the Lighthouse Creek channel, east of and adjacent to the project site. A rip-rap energy dissipater would be provided at the proposed discharge location to minimize potential erosion impacts. Therefore, potential long-term erosion impacts resulting from project site runoff would be **less than significant (Class III)**.

#### **5.2.4 Cumulative Impacts**

Cumulative development projects in the vicinity of the 1837½ El Camino de la Luz project site are described on Table 4.3-1 and the location of the projects are depicted on Figure 4.3-1. In general, the cumulative development projects consist of small- to moderately-sized residential remodels or the development of new single-family residential structures. The cumulative development projects closest to the proposed project site are located at 1925 El Camino del la Luz and 2010 Meigs Road (project site Nos. 1 and 8 on Figure 4.3-1). Cumulative development projects would have the potential to result in a significant cumulative slope stability impact if they would change the configuration of the bluff at or near the proposed project site, or result in a substantial increase in storm water runoff and/or a substantial increase in groundwater levels.

The cumulative development project located at 1925 El Camino de la Luz would result in the development of a new residence on property that was involved in the 1978 El Camino de la Luz landslide. Such a project would have the potential to result in a significant project-specific slope stability impact, and significant cumulative impacts could also occur resulting from project-related changes to the configuration of the bluff,

the addition of weight to the bluff and an increase in stormwater runoff and groundwater levels. However, it can be reasonably expected that the project at 1925 El Camino de la Luz will be required to demonstrate that its slope stability impacts can be feasibly reduced to a less than significant level and that other project-related actions that could affect the stability of the landslide and surrounding bluff areas would also be reduced to a less than significant level before a building permit is issued. Furthermore, even if this cumulative development project were to incrementally increase the probability of slope movement in the project area, it is unlikely that this cumulative development project would adversely affect the 1837½ El Camino de la Luz project because the 1978 landslide did not impact the proposed project site.

Three cumulative development projects have been identified on bluff-top properties in the general vicinity of the 1837½ El Camino de la Luz project site, and their locations are depicted as sites 2, 5, and 6 on Figure 4.3-1. The project at 2547 Medcliff Road (site No. 6) is currently under construction. Each of these cumulative projects must demonstrate that they would not result in significant project-specific landslide-related impacts, and due to their distance from the 1837½ El Camino de la Luz project site, would not result in or contribute to any project-related slope stability impacts.

Development that may occur at the 2010 Meigs Road cumulative development site would be located approximately 1,000 feet northeast of the project site. Therefore, this cumulative development project would not result in an increase in the weight placed upon the bluff in the proposed project area, or result in a substantial increase in groundwater levels in the vicinity of the proposed project site. Therefore, this cumulative development project would not result in or substantially contribute to any project-related slope stability impacts.

Other identified cumulative development projects consist of new residences or small additions to existing structures. These cumulative development projects would be located a minimum of 1,500 feet northwest of the proposed project site, and would not result in a cumulatively considerable increase in runoff or a substantial increase in local groundwater levels. The cumulative development projects would add weight to the ground surface, however, the increased weight-related impacts is not considered significant because of the relatively small nature of the building projects and the distance provided between the cumulative project sites and the proposed project site bluff.

Although each of the proposed cumulative development projects would add structural square footage in the general area of the 1837½ El Camino de la Luz project site, all cumulative development projects would be required to comply with existing site development and building regulations implemented by the City, as well as other applicable erosion and water quality protection requirements. Consequently, the 1837½ El Camino de la Luz project would not result in a cumulatively considerable increase in geologic hazard risk and would result in **less than significant (Class III)** cumulative geological hazard impacts.



### **5.2.5 Mitigation Measures and Residual Impacts**

Implementation of the following mitigation measures would reduce potential slope stability and soil-related impacts of the proposed project to a less than significant level.

**GEO-1 An inadequate drainage system on the project site would have the potential to result in a significant slope stability impact.**

**GEO-1a. Drainage System Requirements.** All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to Lighthouse Creek. Landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

**GEO-2 The proposed project has the potential to be affected by subsidence and expansive soil impacts.**

**GEO-2a Foundation Design Approval.** The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.



## **6.0 PLANS AND POLICY ANALYSIS**

This section provides a preliminary evaluation of the El Camino de la Luz Residence project's compliance with applicable requirements of the California Coastal Act, the City's Local Coastal Plan, General Plan, Zoning Ordinance and Single-Family Residence Design Guidelines. The Santa Barbara Planning Commission and City Council will make the final determination regarding the project's consistency with applicable plans and policies.

### **6.1 ZONING ORDINANCE REQUIREMENTS**

The project site is located within an area zoned "E-3" (One-Family Residence), and that also has a SD-3 (Coastal Overlay) Zone and is located within the Hillside Design Overlay area. The project site conforms to the "E-3" zone minimum parcel size requirement of 7,500 square feet per lot, but does not meet the requirement for provision of a minimum of 60 feet of frontage on a public street. The applicant has requested approval of a modification to the frontage requirement. The proposed single family residence development generally conforms to Zoning Ordinance requirements and would be consistent with the site's residential land use designation.

### **6.2 COASTAL ACT and LOCAL COASTAL PLAN POLICIES**

*California Coastal Act Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Potentially Consistent with Proposed Mitigation Measures. The proposed residential project would not adversely affect public views along the ocean, but the structure would encroach into existing ocean view corridors provided from several important public scenic view points, including the "benches" and lawn areas located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce

view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure consistency with the view protection requirements of this policy. The proposed project would not substantially alter natural landforms, or be visually incompatible with surrounding areas. The proposed project site is a vacant lot but is not located in a visually degraded area.

***Policy 2.1.*** *Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

Potentially Consistent. The project site provides an access path down the bluff to the beach, however, the existing pathway is not a public beach access. The project has not proposed to make any alterations to the existing beach access pathway.

***Policy 5.3.*** *New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

Potentially Consistent with Proposed Mitigation Measures. As described in Section 5.1.3 (Threshold A-1) of this EIR, the size and general appearance of the proposed residence would be consistent with existing development located along El Camino de la Luz. Two parking spaces would be provided on the project site consistent with zoning requirements. Therefore, the project would not overburden public on-street parking resources. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure T-1, which requires that the project applicant provide evidence of adequate and legal access to the project site. Compliance with the requirements of this mitigation measure would make the proposed project consistent with the access requirements of this policy.

***Policy 6.8.*** *The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

Potentially Consistent with Proposed Mitigation Measures. The proposed project would provide a 25-foot setback from the top of bank for Lighthouse Creek, which is located along the eastern perimeter of the project site. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure W-1, which requires approval of project plans for grading, drainage, stormwater facilities and project development to ensure that potential construction-related and long-term runoff, erosion and other water quality impacts are reduced to a less than significant level. The implementation of adopted City standards and construction site requirements, such as the

Building and Safety Division's Erosion/Sedimentation Control Policy and Stormwater Management Plan, would reduce the potential for project-related erosion, sedimentation and other discharges to the creek and provide consistency with the requirements of this policy.

***Policy 8.1.*** *All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.*

Potentially Consistent. Project site runoff, as well as water that flows onto the project site from the adjacent street, would be collected by a series of on-site catch basins and would be conveyed by underground pipes to a new discharge located in Lighthouse Creek. The collected water would then flow a short distance to the creek's terminus and would be discharged to the ocean. Due to the topography of the project site and the area to the north, landward drainage of project site runoff would not be feasible. The proposed project would not result any drainage structures or improvements on the bluff face.

***Policy 8.2.*** *With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...*

Potentially Consistent. An informal access path is located on the project site down the bluff face. The project has not proposed to make any alterations to the existing beach access pathway.

***Policy 9.1.*** *The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

Potentially Consistent with Proposed Mitigation Measures. The proposed residential project would not adversely affect public views along the ocean, but the structure would encroach into existing ocean view corridors provided from several important public scenic view points, including the "benches" and lawn areas located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the

project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure preservation of existing scenic views.

### **6.3 GENERAL PLAN POLICIES**

***Conservation Element: Visual Resources Policy 2.0.*** *Development on hillsides shall not significantly modify the natural topography and vegetation.*

Potentially Consistent. Implementation of the proposed project would require only a minimal amount of grading, primarily to construct a driveway, prepare the building foundation and install the proposed drainage system. Therefore, the proposed project would not significantly alter the topography of the project site or remove a substantial amount of vegetation.

***Conservation Element: Visual Resources Policy 3.0.*** *New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.*

Potentially Consistent with Proposed Mitigation Measures. The proposed project would substantially obstruct views to the ocean provided from several important public scenic view points, including the “benches” area located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure consistency with this policy.

***Conservation Element: Visual Resources Policy 6.0.*** *Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.*

Potentially Consistent. The proposed project site is not located on a ridgeline and would not be visible from large areas of the community. As described in Section 5.1.3 of this EIR (Threshold A-2, Other Views), the proposed residence would not result in significant view-related impacts as seen from the beach area that is south of and adjacent to the project site.

#### **6.4 SINGLE FAMILY RESIDENCE DESIGN GUIDELINES**

The Single Family Residence Design Guidelines provide a variety of measures to blend homes into the natural surroundings and to reduce the “apparent height” (the lowest point of contact with grade to the highest pint of the building dimension) of the structure. Prescribed measures applicable to the proposed project are listed below:

- 27.1 Balance stepping the building up or down the hill with avoiding excessive spill down.
- 27.2 Balance setting the building into the hillside with minimizing grading.
- 27.3 Avoid large continuous paved areas. Paved areas should be broken up by using colored or textured materials.
- 27.4 Natural earth tone colors that blend with the surrounding topography and vegetation are encouraged.
- 27.5 Fit in with hillside topography and background
- 27.6 Avoid interrupting natural ridgelines and skylines. Set the house below these.
- 27.7 Use landscaping to blend the structure with the environment.
- 27.8 Use materials and colors to reduce the apparent bulk.
- 27.9 Minimize exposed foundations and undersides of structures (e.g., underside of buildings or decks).
- 27.8 Avoid these design mistakes which raise both aesthetic and fire safety concerns:
  - Exposed underfloor areas
  - Large downhill cantilevers
  - Tall support columns for overhanging areas

- 29.1 Homes with an apparent height less than 30 feet are preferable. Design review boards will carefully consider appropriateness of homes exceeding an apparent height of 30 feet.
- 29.2 Although the Municipal Code height limit is 30 feet in single family residential zones, appropriate hillside project proposals usually have a height of 25 feet or less, especially where the slope is less than 25%.

Potentially Consistent with Proposed Mitigation Measures. As depicted on Figures 3.3-2 and 3 (proposed residence elevations), the design of the proposed residence would be inconsistent with several Design Guideline recommendations for residences located on sloping (hillside) lots. Specifically, the proposed project design would not set the structure into the sloping portion of the proposed building area; the proposed residence would not be stepped up or down the building slope area; the undersides of a deck and foundation walls would be exposed, and the apparent height of the structure would be approximately 35 feet.

The implementation of proposed mitigation measures and alternative project designs would facilitate the development of a residence on the project site that would be consistent with the above design criteria by minimizing the height of the residence; placing the lower levels of the residence below grade, stepping the building down the existing slope; and conducting most site grading under the structure. In addition, the alternative designs evaluated in Section 8.0 of this EIR would place decks that extend out from the structure on-grade or just above grade, and minimize the appearance of foundation walls.



## **6.0 PLANS AND POLICY ANALYSIS**

This section provides a preliminary evaluation of the El Camino de la Luz Residence project's compliance with applicable requirements of the California Coastal Act, the City's Local Coastal Plan, General Plan, Zoning Ordinance and Single-Family Residence Design Guidelines. The Santa Barbara Planning Commission and City Council will make the final determination regarding the project's consistency with applicable plans and policies.

### **6.1 ZONING ORDINANCE REQUIREMENTS**

The project site is located within an area zoned "E-3" (One-Family Residence), and that also has a SD-3 (Coastal Overlay) Zone and is located within the Hillside Design Overlay area. The project site conforms to the "E-3" zone minimum parcel size requirement of 7,500 square feet per lot, but does not meet the requirement for provision of a minimum of 60 feet of frontage on a public street. The applicant has requested approval of a modification to the frontage requirement. The proposed single family residence development generally conforms to Zoning Ordinance requirements and would be consistent with the site's residential land use designation.

### **6.2 COASTAL ACT and LOCAL COASTAL PLAN POLICIES**

*California Coastal Act Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Potentially Consistent with Proposed Mitigation Measures. The proposed residential project would not adversely affect public views along the ocean, but the structure would encroach into existing ocean view corridors provided from several important public scenic view points, including the "benches" and lawn areas located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce

view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure consistency with the view protection requirements of this policy. The proposed project would not substantially alter natural landforms, or be visually incompatible with surrounding areas. The proposed project site is a vacant lot but is not located in a visually degraded area.

***Policy 2.1.*** *Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

Potentially Consistent. The project site provides an access path down the bluff to the beach, however, the existing pathway is not a public beach access. The project has not proposed to make any alterations to the existing beach access pathway.

***Policy 5.3.*** *New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

Potentially Consistent with Proposed Mitigation Measures. As described in Section 5.1.3 (Threshold A-1) of this EIR, the size and general appearance of the proposed residence would be consistent with existing development located along El Camino de la Luz. Two parking spaces would be provided on the project site consistent with zoning requirements. Therefore, the project would not overburden public on-street parking resources. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure T-1, which requires that the project applicant provide evidence of adequate and legal access to the project site. Compliance with the requirements of this mitigation measure would make the proposed project consistent with the access requirements of this policy.

***Policy 6.8.*** *The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

Potentially Consistent with Proposed Mitigation Measures. The proposed project would provide a 25-foot setback from the top of bank for Lighthouse Creek, which is located along the eastern perimeter of the project site. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure W-1, which requires approval of project plans for grading, drainage, stormwater facilities and project development to ensure that potential construction-related and long-term runoff, erosion and other water quality impacts are reduced to a less than significant level. The implementation of adopted City standards and construction site requirements, such as the

Building and Safety Division's Erosion/Sedimentation Control Policy and Stormwater Management Plan, would reduce the potential for project-related erosion, sedimentation and other discharges to the creek and provide consistency with the requirements of this policy.

***Policy 8.1.*** *All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.*

Potentially Consistent. Project site runoff, as well as water that flows onto the project site from the adjacent street, would be collected by a series of on-site catch basins and would be conveyed by underground pipes to a new discharge located in Lighthouse Creek. The collected water would then flow a short distance to the creek's terminus and would be discharged to the ocean. Due to the topography of the project site and the area to the north, landward drainage of project site runoff would not be feasible. The proposed project would not result any drainage structures or improvements on the bluff face.

***Policy 8.2.*** *With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...*

Potentially Consistent. An informal access path is located on the project site down the bluff face. The project has not proposed to make any alterations to the existing beach access pathway.

***Policy 9.1.*** *The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

Potentially Consistent with Proposed Mitigation Measures. The proposed residential project would not adversely affect public views along the ocean, but the structure would encroach into existing ocean view corridors provided from several important public scenic view points, including the "benches" and lawn areas located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the

project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure preservation of existing scenic views.

### **6.3 GENERAL PLAN POLICIES**

***Conservation Element: Visual Resources Policy 2.0.*** *Development on hillsides shall not significantly modify the natural topography and vegetation.*

Potentially Consistent. Implementation of the proposed project would require only a minimal amount of grading, primarily to construct a driveway, prepare the building foundation and install the proposed drainage system. Therefore, the proposed project would not significantly alter the topography of the project site or remove a substantial amount of vegetation.

***Conservation Element: Visual Resources Policy 3.0.*** *New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.*

Potentially Consistent with Proposed Mitigation Measures. The proposed project would substantially obstruct views to the ocean provided from several important public scenic view points, including the “benches” area located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The importance of the affected public views is increased because of their location in or association with a public park. As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean. Proposed mitigation measures require that the proposed residence be redesigned so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Architectural Board of Review. A new residence on the project site that substantially complies with the design criteria suggested by proposed mitigation measures and evaluated as alternatives to the proposed project would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the proposed mitigation measures would help to ensure consistency with this policy.

***Conservation Element: Visual Resources Policy 6.0.*** *Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.*

Potentially Consistent. The proposed project site is not located on a ridgeline and would not be visible from large areas of the community. As described in Section 5.1.3 of this EIR (Threshold A-2, Other Views), the proposed residence would not result in significant view-related impacts as seen from the beach area that is south of and adjacent to the project site.

#### **6.4 SINGLE FAMILY RESIDENCE DESIGN GUIDELINES**

The Single Family Residence Design Guidelines provide a variety of measures to blend homes into the natural surroundings and to reduce the “apparent height” (the lowest point of contact with grade to the highest pint of the building dimension) of the structure. Prescribed measures applicable to the proposed project are listed below:

- 27.1 Balance stepping the building up or down the hill with avoiding excessive spill down.
- 27.2 Balance setting the building into the hillside with minimizing grading.
- 27.3 Avoid large continuous paved areas. Paved areas should be broken up by using colored or textured materials.
- 27.4 Natural earth tone colors that blend with the surrounding topography and vegetation are encouraged.
- 27.5 Fit in with hillside topography and background
- 27.6 Avoid interrupting natural ridgelines and skylines. Set the house below these.
- 27.7 Use landscaping to blend the structure with the environment.
- 27.8 Use materials and colors to reduce the apparent bulk.
- 27.9 Minimize exposed foundations and undersides of structures (e.g., underside of buildings or decks).
- 27.8 Avoid these design mistakes which raise both aesthetic and fire safety concerns:
  - Exposed underfloor areas
  - Large downhill cantilevers
  - Tall support columns for overhanging areas

- 29.1 Homes with an apparent height less than 30 feet are preferable. Design review boards will carefully consider appropriateness of homes exceeding an apparent height of 30 feet.
- 29.2 Although the Municipal Code height limit is 30 feet in single family residential zones, appropriate hillside project proposals usually have a height of 25 feet or less, especially where the slope is less than 25%.

Potentially Consistent with Proposed Mitigation Measures. As depicted on Figures 3.3-2 and 3 (proposed residence elevations), the design of the proposed residence would be inconsistent with several Design Guideline recommendations for residences located on sloping (hillside) lots. Specifically, the proposed project design would not set the structure into the sloping portion of the proposed building area; the proposed residence would not be stepped up or down the building slope area; the undersides of a deck and foundation walls would be exposed, and the apparent height of the structure would be approximately 35 feet.

The implementation of proposed mitigation measures and alternative project designs would facilitate the development of a residence on the project site that would be consistent with the above design criteria by minimizing the height of the residence; placing the lower levels of the residence below grade, stepping the building down the existing slope; and conducting most site grading under the structure. In addition, the alternative designs evaluated in Section 8.0 of this EIR would place decks that extend out from the structure on-grade or just above grade, and minimize the appearance of foundation walls.

## **7.0 OTHER SECTIONS REQUIRED BY CEQA**

### **7.1 GROWTH INDUCING IMPACTS**

Section 15126.2(d) of the CEQA Guidelines requires an EIR to “*discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...*” In general terms, a project may result in a significant growth inducing impact if it individually or cumulatively with other projects results in any of the actions described in the following examples:

- The project removes an obstacle to growth, such as: the establishment of an essential public service, the provision of new access to an area, or a change in zoning or general plan designation.
- The project results in economic expansion, population growth or the construction of additional housing occurs in the surrounding environment in response to the project, either directly or indirectly.

The El Camino de la Luz residence project would be served by sewer, water and other utility services that have been established in the project area. Access to the project site would be provided by an existing substandard-sized easement. No road improvements would be required to obtain access to the project site. Therefore, the proposed project would not require an extension of public services that have the potential to result in or facilitate unplanned growth in the project area.

The proposed project would result in the development of one single-family residence. The project could generate short-term construction employment opportunities, but would not result in substantial population growth in the project region. Therefore, the proposed project would not result in significant growth inducing impacts.

### **7.2 CLIMATE CHANGE and GREENHOUSE GAS EMISSIONS**

After the Draft EIR for the El Camino de la Luz residence project was originally prepared in 2007, the State adopted legislation that requires CEQA evaluations to include an assessment of a project’s potential to contribute to global climate change impacts. CEQA Guidelines Section 15064.4(b) now indicates that a Lead Agency should consider the following factors when assessing the significance of a project’s climate impacts: assess the extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; determine if a project would exceed an applicable threshold of significance; and the extent to which the project complies with

regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of greenhouse gas emissions. The City of Santa Barbara has not adopted a threshold of significance that can be used to evaluate the significance of greenhouse gas emissions that would be generated by the proposed project.

Other recent changes to CEQA related to the evaluation of a project's greenhouse gas emission impacts include additions to CEQA Guidelines Appendix G, the Environmental Checklist Form. Changes to Appendix G most applicable to the El Camino de la Luz residence project include the addition of Section VII Greenhouse Emissions. Revisions to Appendix G were also made to Section II related to the evaluation of project-related impacts to forest resources, and Section XVI related to the evaluation of a project's transportation and traffic impacts. Amendments to Appendix G, Section II (Agriculture and Forestry Resources) were adopted because forests serve as a substantial carbon dioxide sink (i.e., rather than emitting carbon dioxide, forests remove carbon dioxide from the atmosphere).

Information and analysis related to the greenhouse gas emissions of the El Camino de la Luz residence project is provided below.

### **7.2.1 Global Change Background Information**

“Global climate change” and “global warming” are both terms that describe changes in the earth's climate. Global climate change is a broader term used to describe any worldwide, long-term change in the earth's climate. This change could be an increase or decrease in temperatures, or a shift in precipitation patterns. The term global warming is more specific than global climate change and refers to a general increase in world-wide temperatures.

Although there is not unanimous agreement regarding the occurrence, causes, or effects of global climate change, there is a substantial body of evidence that climate change is occurring due to the introduction of gases that trap heat in the atmosphere. These heat trapping gases are collectively referred to as “greenhouse gases.” State law defines greenhouse gases to include the following: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Another greenhouse gas is water vapor. Water vapor is not recognized in state law and climate change programs such as the Kyoto Protocol because there is no obvious correlation between water vapor concentration and specific human activities. Water vapor appears to act in a feedback manner; higher temperatures lead to higher water vapor concentrations which in turn cause more global warming.

Greenhouse gases have varying global warming potential. The reference gas for global warming potential is carbon dioxide, which has been assigned a global warming potential of “1.” Methane gas is another gas that contributes to global warming and has been assigned a global warming potential of 21, which means that it has a greater global warming effect than carbon dioxide on a molecule per molecule basis. Sulfur hexafluoride has a global warming potential of 23,900. The most important greenhouse gas in human-induced global warming is carbon dioxide. While other greenhouse gases



have higher global warming potential, carbon dioxide is emitted in such vastly higher quantities that it accounts for 85 percent of the global warming potential of all greenhouse gases emitted by the United States. Greenhouse gas emissions are typically measured in terms of mass carbon dioxide equivalents, which is the product of the mass of a particular greenhouse gas and its specific global warming potential.

The United Nations Intergovernmental Panel on Climate Change (IPCC) has published its conclusion that “warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.” The IPCC also concluded that global atmospheric concentrations of carbon dioxide, methane and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values determined from ice cores spanning many thousands of years. Most of the observed increase in globally-averaged temperatures since the mid-20<sup>th</sup> century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations. It is likely there has been significant anthropogenic warming over the past 50 years averaged over each continent (except Antarctica). Continued greenhouse gas emissions at or above current rates would cause further warming and induce many changes in global climate systems during the 21st century that would very likely be larger than those observed during the 20<sup>th</sup> century.<sup>1</sup>

According to the IPCC, global warming may cause a variety of environmental changes, such as:

- It is virtually certain that over most land areas, warmer and fewer cold days and nights would occur, and warmer and more frequent hot days and nights would occur.
- It is very likely that the frequency of warm spells/heat waves would be increased over most land areas.
- It is very likely that the frequency of heavy precipitation events would be increased over most areas.
- It is likely that areas affected by drought would be increased.
- It is likely that intense tropical cyclone activity would be increased.
- It is likely that there would be increased incidence of extreme high sea levels.

The 2011 United Nations Climate Change Conference was held in Durban, South Africa. A primary focus of the conference was to establish a global climate change agreement as the Kyoto Protocol’s first commitment period (2008-2012) was about to end. Negotiators at the conference agreed to be part of a legally binding treaty to address global warming. The terms of the future treaty are to be defined by 2015 and become effective in 2020. The agreement is referred to as the “Durban platform” and includes countries such as the U.S., China and India.

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<sup>1</sup> Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment Report, Draft Copy, 16 November, 2007.

## California Legislative Requirements

**Assembly Bill 32.** The California Global Warming Solutions Act of 2006 (AB 32) requires the California Air Resources Board to adopt regulations to evaluate statewide greenhouse gas emissions, and then create a program and emission caps to limit statewide emissions to 1990 levels. The program is to be implemented in a manner that achieves emissions compliance by 2020. AB 32 does not directly amend CEQA or other environmental laws, but it does acknowledge that emissions of greenhouse gases cause significant adverse impacts to human health and the environment. In adopting AB 32, the Legislature found that:

“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.” (Health and Safety Code Section 38501(b).

**Executive Order S-3-05.** On June 1, 2005, Governor Schwarzenegger announced the following greenhouse gas emission reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

**Executive Order S-01-07.** Enacted on January 18, 2007, this Order requires that a statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least ten percent by 2020, and that a low carbon fuel standard for transportation fuels be established for California.

**Senate Bill 97.** This bill (Chapter 148, Statutes 2007) was signed on August 24, 2007 and among other things, constitutes the Legislature’s determination that greenhouse gas emissions and their effects are appropriate subjects for CEQA analysis. The bill also required the Office of Planning and Research to develop, and the California Resources Agency to certify and adopt, amendments to the CEQA Guidelines for the analysis and mitigation of greenhouse gas emissions by January 1, 2010. On December 30, 2009, the Secretary for Natural Resources adopted amendments to the CEQA Guidelines addressing greenhouse gas emissions, and those amendments became effective on March 18, 2010.

**AB 32 Climate Change Scoping Plan.** On December 11, 2008, the California Air Resources Board adopted its *AB 32 Climate Change Scoping Plan*, which outlines a

comprehensive array of approaches and tools to provide reductions in greenhouse gas emissions required to meet the requirements of AB 32. Key elements of the preliminary recommendations for reducing California's greenhouse gas emissions include:

- Expansion and strengthening of existing energy efficiency programs, and building and appliance standards.
- Expansion of the Renewables Portfolio Standard to 33 percent. The California Energy Commission (CEC) estimates that about 12 percent of California's retail electricity is provided from renewable resources, including wind, solar, geothermal, small hydroelectric, biomass, and biogas. Increasing the use of renewables to 33 percent will decrease California's reliance on fossil fuels and reduce emissions of greenhouse gases.
- Development of a California cap-and-trade program. In general, a cap and trade program is a market-based approach to reduce pollution from sources such as industrial processes and power generation. The approach caps the total amount of greenhouse gas emissions and allows covered sources to find the least expensive way to comply. Excess emission reductions can be banked for future use or traded with other firms.
- Implementation of existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Fees to fund the State's long-term commitment to the administration of AB 32.

**SB 375.** This legislation was passed in 2008 and although it does not establish specific greenhouse gas reduction requirements, its intent is to reduce vehicle miles traveled and to promote corresponding reductions in emissions from automobiles and light trucks. The requirements of SB 375 are intended to facilitate the greenhouse emission goals of AB 32 and the legislation has three major goals: 1) to use the regional transportation planning process to help achieve AB 32 goals; 2) to use CEQA streamlining as an incentive to encourage residential projects that help achieve AB 32 greenhouse gas emission reduction goals; and 3) to coordinate the regional housing needs allocation process with the regional transportation planning process. SB 375 integrates AB 32's emission reduction goals by requiring that a Sustainable Communities Strategy be added to the Regional Transportation Plan. In Santa Barbara County, planning efforts are being coordinated by the Santa Barbara County Association of Governments to achieve greenhouse gas reduction targets established by the California Air Resources Board.

### **7.2.3 Greenhouse Gas Emission Evaluation Criteria**

The recently adopted CEQA Guidelines amendments do not establish a numerical threshold of significance to determine if a project's greenhouse gas emissions would result in a significant environmental impact, however, the following evaluation thresholds are provided:

1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Thresholds for evaluating the significance of a project's greenhouse gas emissions and resulting global climate change impacts have not been adopted on a local level, however, the County and City of Santa Barbara have recently used on an interim basis a significance threshold that was adopted by the Bay Area Air Quality Management District (BAAQMD) in June 2010. The BAAQMD threshold and supporting analysis are considered appropriate for land use projects in Santa Barbara because the County's population growth, land use patterns, General Plan policies and average commute patterns and times are similar to certain Bay Area counties such as Sonoma, Solano and Marin. Based on the BAAQMD threshold, a project's contribution to cumulative impacts to greenhouse gas emissions and climate change impacts would be cumulatively considerable if the project would produce in excess of 1,100 metric tons of carbon dioxide equivalents per year.

### **7.2.4 Project Related Greenhouse Gas Emission Evaluation**

**Existing Greenhouse Gas Emissions.** The proposed project site is vacant. Therefore, the site is not a substantial source of greenhouse gas emissions. There is not a substantial amount of vegetation on the approximately one-half acre project site, therefore, the site is not a substantial source of carbon dioxide sequestration.

**Short-Term Greenhouse Gas Emissions.** Short-term construction-related emissions of carbon dioxide that would result from the development of the proposed project were estimated using the URBEMIS 2007 computer program. Sources of carbon dioxide emissions include the use of on- and off-road construction equipment and construction worker trips. It was estimated that project-related construction activities would result in the emission of approximately 70 tons of carbon dioxide without the implementation of any mitigation measures. Calculation sheets used to estimate the project's construction-related carbon dioxide emissions are provided in Appendix F.

Construction-related emissions of greenhouse gases required to develop the proposed project would occur over a relatively limited period of time (approximately one

year) and result from the implementation of small, single-family residence project. Due to the “one-time” nature of the project-related construction emissions and the small amount of emissions that would result, the proposed project would not result in the generation of greenhouse gases that would substantially contribute to climate change impacts or result in a significant impact on the environment. The small project-related emissions of greenhouse gases would not impede the attainment of greenhouse gas emission reduction goals. Therefore, the proposed project’s construction-related emissions would not substantially contribute to global climate change impacts.

**Long-Term Greenhouse Gas Emissions.** Long-term emissions of carbon dioxide that would result from project-related mobile sources and area sources (i.e., natural gas combustion and landscape maintenance) were estimated using the URBEMIS 2007 computer program. Long-term indirect emissions of carbon dioxide that would result from project-related use of electricity were estimated using emissions factors provided by the Santa Barbara County Air Pollution Control District (*Scope and Content of Air Quality Sections in Environmental Documents, 2010*). The project’s long-term emissions of carbon dioxide from mobile and area sources were estimated to be approximately 12.97 tons per year without the implementation of mitigation measures. Indirect emissions from electricity use were estimated to be approximately 1.84 tons per year. The total carbon dioxide emitted by the proposed project would be approximately 14.81 tons per year, which is equivalent to 13.4 metric tons per year, or approximately 0.00001 million metric tons per year. Calculation sheets used to estimate the project’s long-term carbon dioxide emissions are provided in Appendix F. Other indirect greenhouse gas emissions that would also result from the project, such as emissions associated with the disposal and decomposition of solid waste generated by the project and potable water delivery, would be very minor compared to the estimated emissions from mobile and area sources and would not substantially contribute to the project’s emissions of greenhouse gases.

To determine if the proposed project would substantially interfere with the achievement of established greenhouse emission reduction goals, it is necessary to compare project-related emissions in terms of the overall scale of greenhouse gas emissions that occur on a state level, and estimated reductions in greenhouse gas emissions required to achieve the requirements of AB 32.

The California Air Resources Board has determined that for the purposes of implementing AB 32, it is estimated that the 1990 level of greenhouse gas emissions in California was 427 million metric tons of carbon dioxide equivalents. Therefore, the target level for AB 32 emission reductions is also 427 million metric tons of carbon dioxide equivalents. The Air Resources Board staff has also estimated the State’s greenhouse gas emissions in 2020 without the implementation of additional greenhouse gas reduction strategies. The 2020 “business-as-usual” estimate is approximately 600 million metric tons of carbon dioxide equivalents. The difference between the 2020 “business-as-usual” estimate and the 1990 emissions level is approximately 173 million metric tons and is California’s emission reduction goal. The long-term emissions of

0.00001 million metric tons of carbon dioxide per year by the proposed project is an extremely small amount when compared to the overall emission reduction target required to achieve AB 32 reduction goals. Furthermore, the project-related greenhouse gas emissions of 13.4 metric tons per year would be substantially below the BAAQMD threshold of 1,100 metric tons per year.

The proposed project site does not include any forest or timber land resources as defined by the Public Resources Code, and the project site does not contain a substantial amount of vegetation. Therefore, the project would not result in a significant loss of vegetation that serves as a substantial carbon dioxide sink. Based on the project site characteristics and very low project-related greenhouse gas emissions, the proposed project would not substantially contribute to climate change impacts or result in a significant impact on the environment, and project-related emissions of greenhouse gases would not impede the attainment of greenhouse gas emission reduction goals of AB 32. Therefore, the proposed project's long-term emissions would not substantially contribute to global climate change impacts and the project would **result in less than significant climate change-related impacts (Class III)**.

**Other Climate Change-Related Impacts.** As indicated above, the effects of climate change may include a rise in sea level. Estimates of future sea level elevations vary considerably based on assumptions regarding greenhouse gas emission control effectiveness and other factors. Based on sea level rise predictions provided by the California Ocean Protection Council (California, 2011a), the California State Lands Commission recommends an evaluation of the effects caused by a rise in sea level of 16 inches by 2050 and a rise of 55 inches by 2100, when compared to 2000 baseline conditions (California, 2011b).

The proposed residence on the project site is located at an elevation of approximately 100 feet above sea level. Therefore a rise in sea level of 55 inches by 2100 would not adversely affect a structure developed on the top of the bluff.

Although long-term increases in sea level have the potential to adversely affect low-lying coastal resources, short-term increases in sea level due to large storms are likely to be of greater concern to coastal infrastructure and development in coastal areas over the next several decades (California, 2010). Damage to coastal facilities may be increased due to the combination of elevated sea levels, large storm waves, and increased storm frequency/intensity that have the potential to occur as a result of climate change.

A rise in sea level and an increase in storm and wave intensity could accelerate the erosion of the bluff at the project site. While many factors would affect how sea level rise and wave action could impact the bluff at the project site, the *California Climate Adaptation Strategy* (2009) indicates that a recent study of southern California concluded that erosion rates "are expected to accelerate by 20 percent for a sea-level rise of 39.4 inches (100 cm)." Under such a scenario, the effective rate of bluff erosion would be approximately five inches per year rather than the current four inches per year. At this

accelerated erosion rate, potentially unstable bluff conditions could occur at the project site after a period of approximately 140 years rather than the 180-year period estimated under existing conditions (please refer to EIR section 5.2.3). This is a substantially longer time period than the more conservative 75-year project site bluff erosion setback standard applied to the proposed project.

In conclusion, the effects of sea level rise and climate change-related effects on the proposed project are considered to be **less than significant (Class III)** and no mitigation measures are required.





## 8.0 ALTERNATIVES

Section 15126.6(a) of the *CEQA Guidelines* states that “an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” The EIR is to consider a “reasonable range” of alternatives to foster informed decision-making and public participation. Section 15126.6(b) of the *CEQA Guidelines* indicates that the EIR “shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.”

Three alternatives to the El Camino de la Luz residence project have been evaluated by this EIR:

- **No Project.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.
- **Alternative Design Concept No. 1.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project design with a similar amount of building area as the proposed project.
- **Alternative Design Concept No. 2.** The objective of this alternative is to minimize project-related aesthetic impacts by considering a revised project design for a new residence that is smaller than the proposed project.

To provide City decision-makers with flexibility to consider and possibly approve a design alternative to the proposed project, this EIR has evaluated Alternative Design Concepts 1 and 2 at a level of detail that is similar to the analysis of the proposed project. This has been done, in part, by developing alternative designs for the development of the project site, and preparing post-development photo-simulations for those designs. The alternative designs are intended to be conceptual studies of potential site development options, and are not meant to impose specific design requirements, architectural styles, or building colors. Rather, the alternative designs are intended to evaluate a range of potential building locations, configurations and massing options that have the potential to reduce aesthetic impacts that would result from the development of a residence on the project site. Building elevations, floor plans and cross-sections have been developed to facilitate the analysis of potential aesthetic impacts, and architectural details such as windows, decks and railings are depicted on the alternative designs only to provide visual clarity and to convey a sense of scale and design feasibility.

Alternative locations for the development of a new single-family home exist in the City of Santa Barbara. However, alternative locations were not evaluated as they would not meet the project objective of developing a new residence on the project site.

Developing an alternative use on the project site was not considered to be a feasible alternative due to the land use requirements of the project site's existing residential (E-3) zoning designation.

An alternative that would move the residence to the west to minimize the structure's encroachment into the view corridor provided from La Mesa Park was considered but not evaluated because placing a residence closer to the western property line would substantially constrain vehicle access to and from the project site. The only point of vehicle access to the project site is from the project site access driveway that extends southward from El Camino de la Luz. The driveway is located on the western edge of the project site. If a vehicle were to travel southward along the driveway and enter the project site/required parking area located along the western edge of the project site, an on-site turning area (i.e., a driveway) would not be provided under this type of alternative to allow the vehicle to turn around before leaving the property. This would require vehicles leaving the project site travel backwards along the project site driveway to El Camino de la Luz. If an on-site turnaround area were to be provided, it would either occupy a substantial area of the buildable portion of the project site, or require that the two-story area of the on-site structure be increased to allow vehicle maneuvering beneath the second floor livable area. In addition, the project site driveway presently provides a view corridor towards the ocean. This view corridor would be maintained by the proposed project, but blocked by an alternative that moved the structure closer to the western property line of the project site. Therefore, it was concluded that a structure located further to the west on the project site would not substantially reduce the potential for visual impacts to off-site viewing locations.

Other alternative locations on the project site were not evaluated because bluff top setback requirements prevent moving the building site to the south, and property line setback requirements prevent moving the structure to the north. Moving the building site to the east would make any structure on the project site more visible from La Mesa Park, which would have the potential to increase the visibility of the structure from public viewing locations.

## **8.1 NO PROJECT ALTERNATIVE**

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a “No Project” alternative. The purpose of this alternative is to “*allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.*” This alternative analysis compares the environmental effects of the project site remaining in its existing condition against environmental effects that would occur if the proposed project were approved.

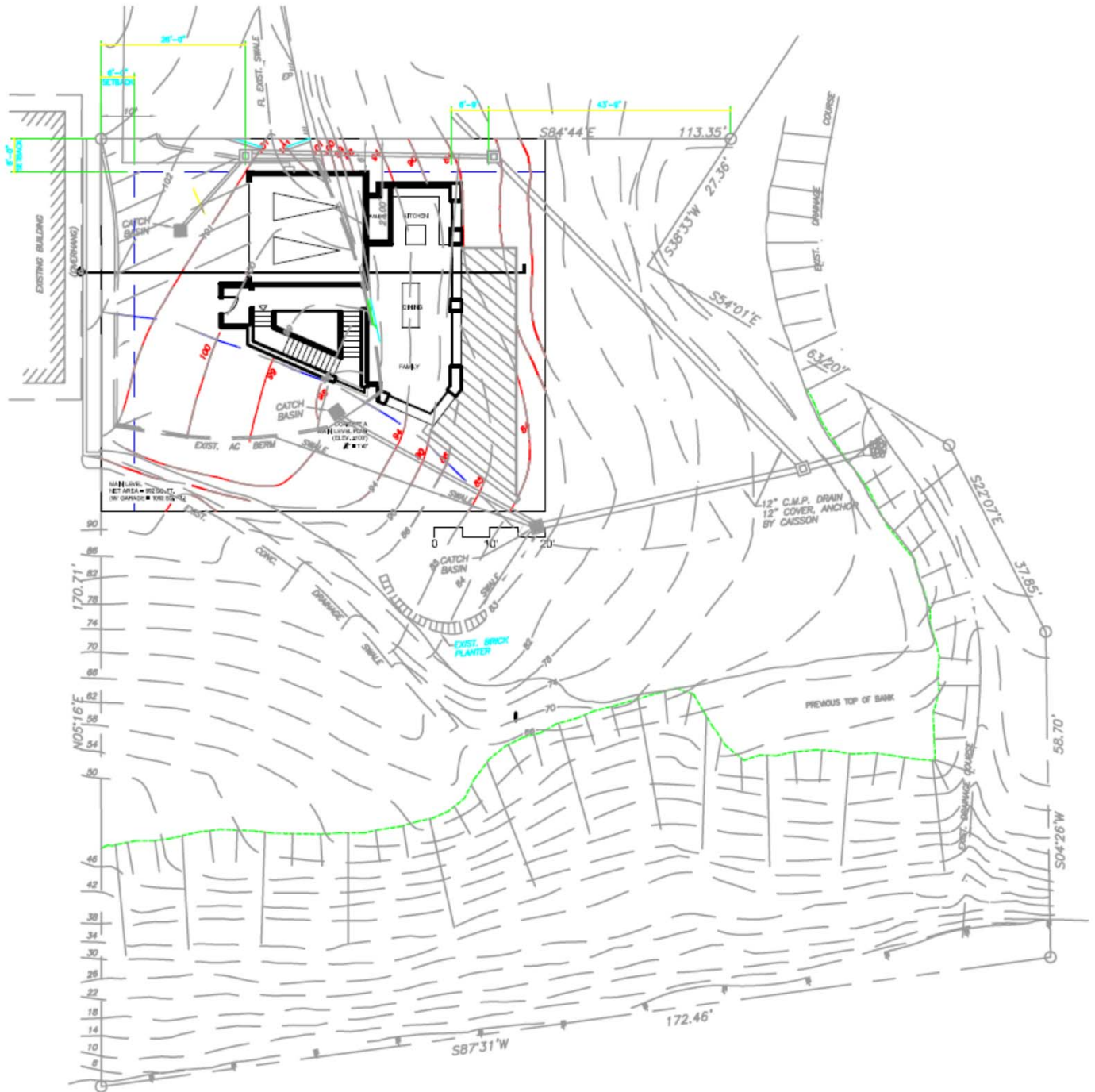
The “No Project” alternative would result in the project site being maintained in its current vacant condition, and no new structures would be developed on the property. Implementation of this alternative would avoid the potential for significant aesthetic and geologic impacts associated with development of the proposed project. Implementation of this alternative, however, would not be required to reduce the proposed project’s aesthetic and geologic impacts to a less than significant level. Implementation of the “No Project” alternative would avoid the potential environmental impacts of the proposed project, but would not achieve the objectives of the project.

## **8.2 ALTERNATIVE DESIGN CONCEPT No. 1**

### **8.2.1 Alternative Description**

It is the objective of Alternative Design Concept No. 1 to provide a residence with a similar amount of livable floor area as would be provided by the proposed project, while also attempting to minimize impacts to important public scenic views provided from La Mesa Park and the Lighthouse Creek footbridge. Design concepts used by this alternative to minimize aesthetic impacts include lowering the finished floor elevation of the structure’s bottom level by excavating the building footprint area, and reducing the size of the structure’s upper level by only providing floor area over the western half of the building footprint.

A site plan for Alternative Design Concept No. 1 is provided on Figure 8.2-1, and design concept elevations depicting the proposed residence are provided on Figures 8.2-2 and 3. Conceptual floor plan layouts and a cross section through the residence are provided on Figures 8.2-4, 5 and 6. Alternative Design Concept No. 1 would be a three-level residence that provides approximately 2,237 square feet of livable floor area. The square footage provided on each floor level is summarized on Table 8.2-1.



Source: Hochhauser Blatter, 2006

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Figure 8.2-1

Alternative Design Concept No. 1 – Site Plan



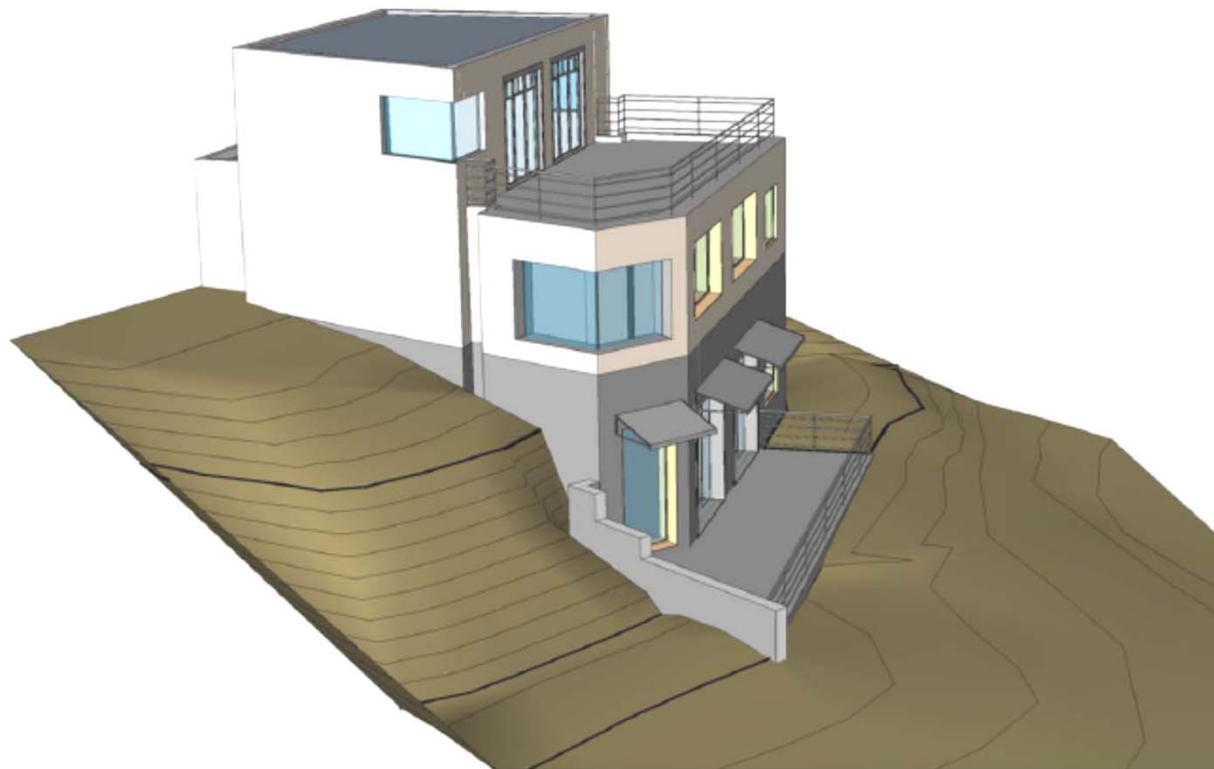
Source: Hochhauser Blatter, 2006

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**Figure 8.2-2**

Alternative Design Concept No. 1 – View From the Northeast



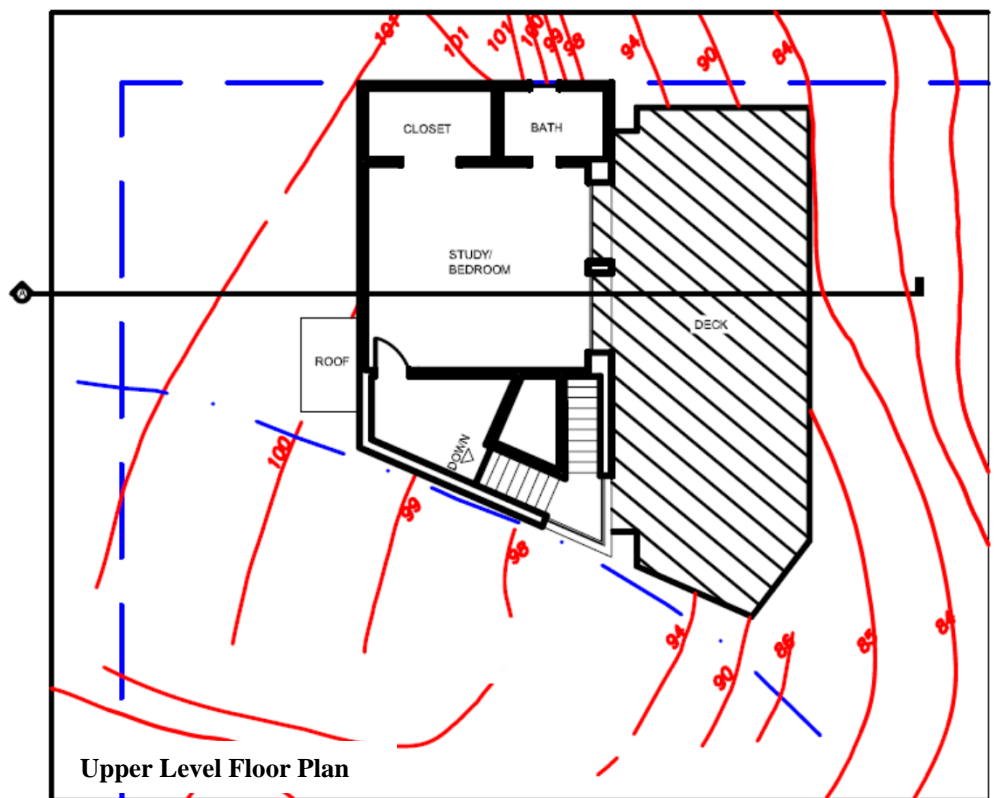
Source: Hochhauser Blatter, 2006

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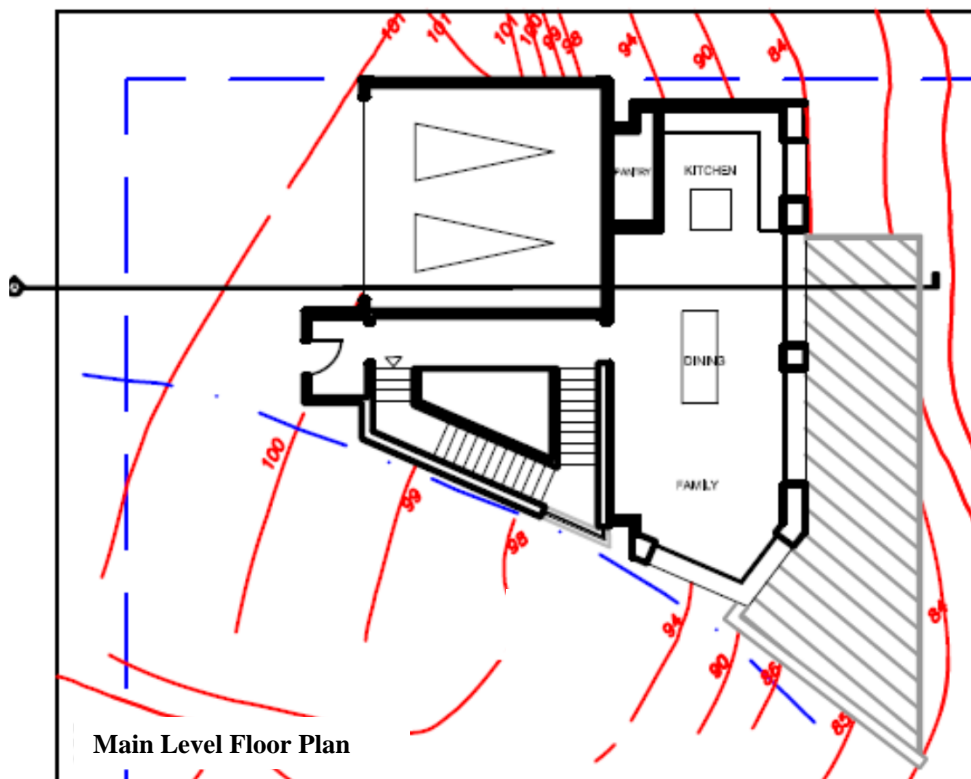
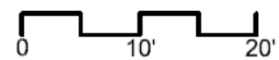
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**Figure 8.2-3**

Alternative Design Concept No. 1 – View From the Southeast



Upper Level Floor Plan



Main Level Floor Plan

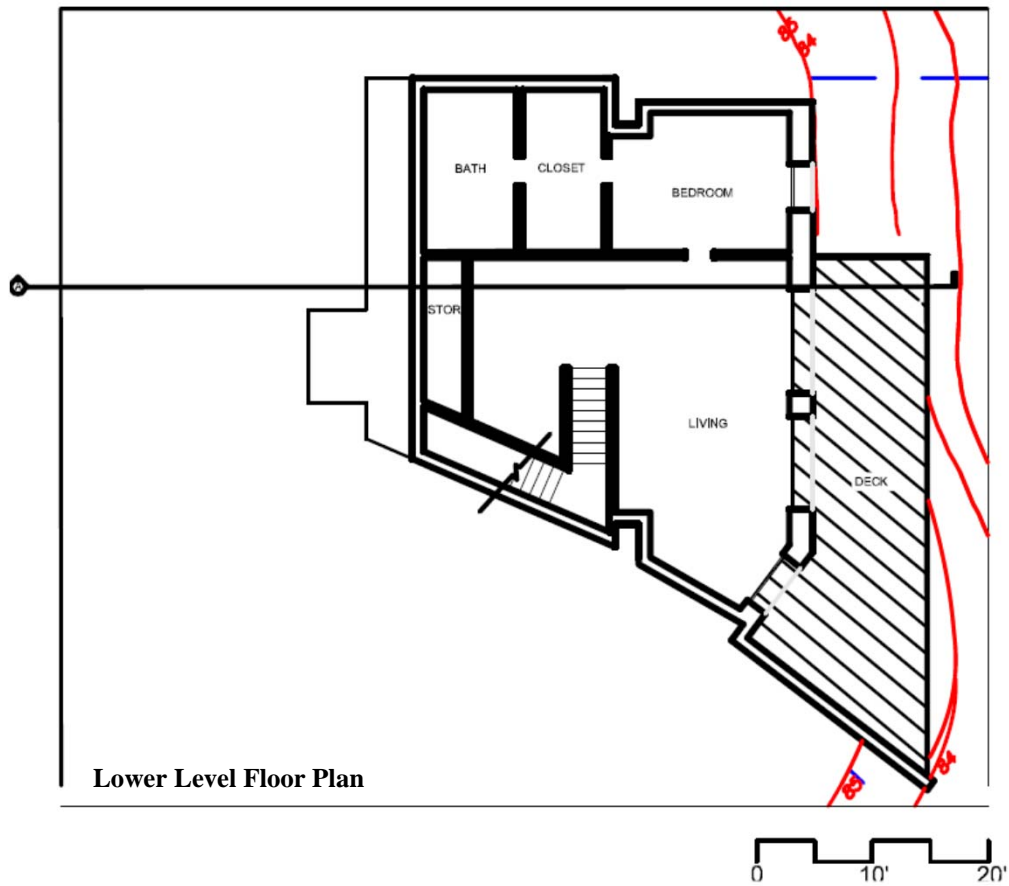
Source: Hochhauser Blatter, 2006

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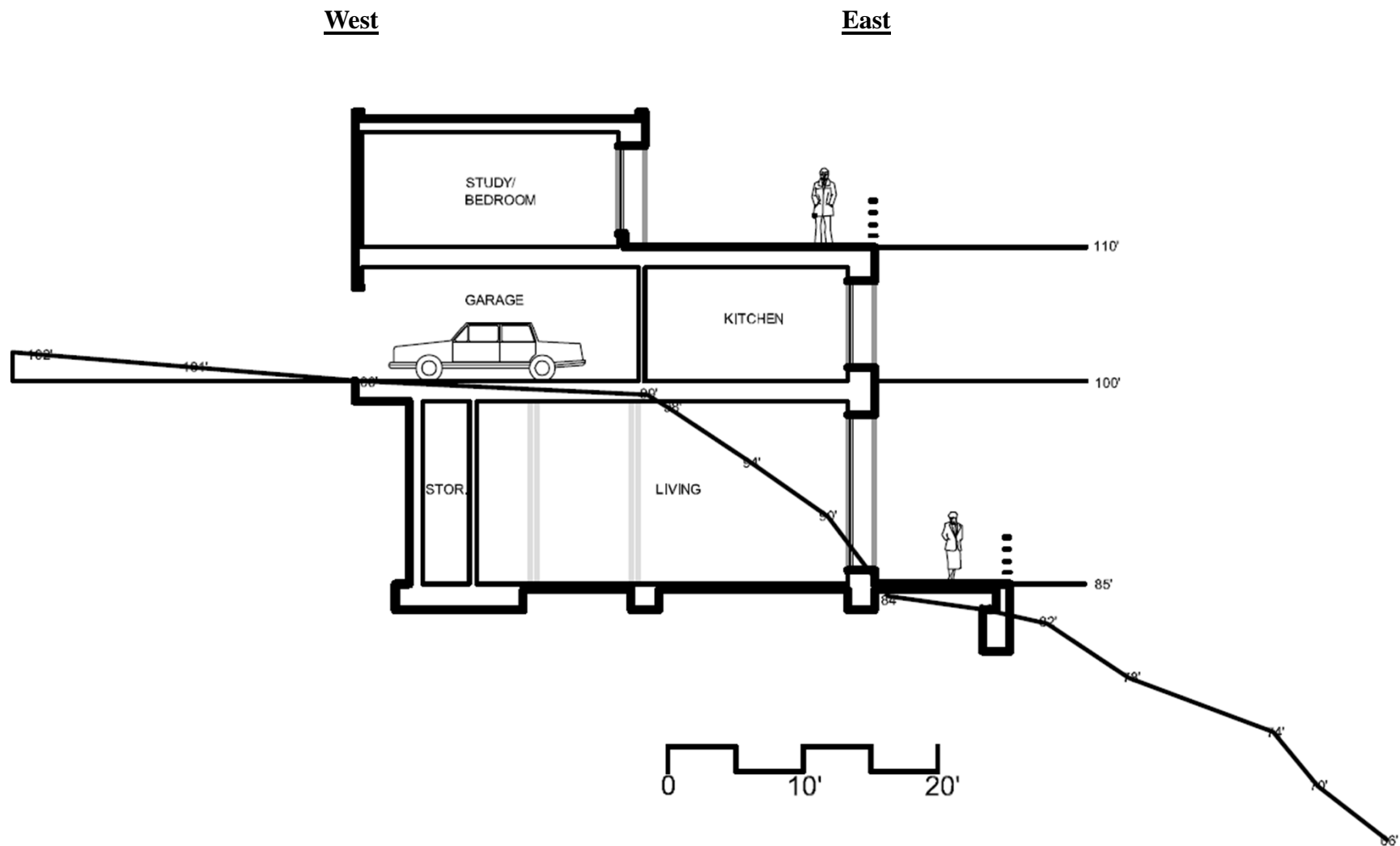
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Figure 8.2-4

Alternative Design Concept No. 1 – Floor Plans







Source: Hochhauser Blatter, 2006

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**Figure 8.2-6**

Alternative Design Concept No. 1 – Cross Section

**Table 8.2-1**  
**Alternative Design Concept No. 1**  
**Residence Size Summary**

	<b>Alternative Design Concept No. 1</b>	<b>Proposed Project</b>
First Floor Livable Area	1,087	893 sq. ft
Second Floor Livable Area	692	606 sq. ft.
Third Floor Livable Area	458	NA
Total Liveable Floor Area	2,237	1,499 sq. ft.
Garage Area	400	443 sq. ft.
Total Floor Area	2,637	1,942 sq. ft

The finished floor elevation of this alternative's first floor would be developed below the existing grade of the project site. As depicted on the cross-section provided on Figure 8.2-6, the maximum depth of excavation would be approximately 15 feet. Approximately 550 cubic yards of grading would be required to implement this alternative design concept. The eastern perimeter wall of the structure would have a height of approximately 25 feet above existing grade, while the east elevation of the structure (including the third level portion of the building) would have an overall height of approximately 35 feet. The western elevation of the structure would have a height of approximately 20 feet above existing grade.

Alternative Design Concept No. 1 places the residence in the same portion of the project site as the proposed project. Setbacks from the top of the ocean bluff, top of bank for Lighthouse Creek, and from adjacent property lines would be generally similar to the setbacks provided by the proposed project.

## **8.2.2 Aesthetics**

***Threshold A-1.*** *Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially degrading an important public scenic view.*

Alternative Design Concept No. 1 would provide approximately 2,237 square feet of livable floor area, which is approximately 738 square feet larger than the proposed project. The increase in livable building area was accomplished by placing the lowest level of the structure below existing grade, which would allow the development of a three-level residence rather than the proposed two-story structure. Based on field observations, the size of this alternative design would be similar to other residences located along the project site access driveway and El Camino de la Luz, and the multi-level design would also be consistent with existing residences. Therefore, the size of

Alternative Design Concept No. 1 would not be out of character with the surrounding neighborhood and important public scenic views in the project area would not be substantially degraded as a result of the size of the alternative project. The building size-related impacts associated with this alternative would be **less than significant (Class III)**.

The use of neutral or earth-tone colors on the exterior of the residence would minimize the potential for the structure to be out of character with surrounding development, and would be consistent with other visual elements located in the three important public scenic views in the vicinity of the project site. Similar to the proposed project, potentially significant impacts that may result from the use of exterior colors that are incompatible with the surrounding neighborhood could be **significant but mitigable (Class II)** and reduced to a less than significant level by requiring ABR approval of proposed colors and future building color changes.

Alternative Design Concept No. 1 would substantially reduce the use of understory walls to facilitate the development of the residence on the sloping, building area portion of the project site. This would be accomplished by placing the lower level of the structure below existing grade. Therefore, potentially significant visual impacts resulting from the use of understory walls would be **less than significant (Class III)** and no mitigation measures would be required.

The development of Alternative Design Concept No. 1 would require approximately 550 cubic yards of grading. Earthwork required to implement this alternative would not substantially alter the appearance of the project parcel as seen from off-site locations. After construction activities are complete, no ground disturbance areas would be visible. Vegetation located on the building pad area and adjacent to the building pad consists primarily of weedy plant species. The removal of those plants would not result in a substantial alteration to the appearance of the project site. Therefore, similar to the proposed project, grading and vegetation removal required to develop the alternative design project would not substantially degrade important public scenic views in the project area and would be a **less than significant impact (Class III)**.

***Threshold A-2.** Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially blocking an important public scenic view corridor.*

La Mesa Park. Areas of La Mesa Park that provide public views of the project site and ocean include the “benches” area near the southern end of the park, and the southern portion of the park’s lawn area.

*“Benches” Area.* A simulation of post-development visual conditions as would be seen from the “benches” area after the development of Alternative Design Concept No. 1 is provided on Figure 8.2-7. Due to the view perspective provided from the benches” area, most of the northern and eastern elevations of the residence would be

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Source: Hochhauser Blatter, 2006

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**Figure 8.2-7**

Alternative Design Concept No. 1 Photo-Simulation: La Mesa Park “Benches” Area

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“visible to persons in the “benches” area of the park. This view perspective places the alternative design residence prominently into the western portion of the view corridor provided from the “benches” area, and approximately nine (9) percent of the existing view of the ocean would be blocked. This is a slight (one percent) reduction in ocean view obstruction when compared to the proposed project. The view blockage reduction was achieved primarily by limiting the building area provided on the upper level of the residence to the western half of the building footprint. Therefore, the alternative design would provide a 738 square foot increase in livable floor space and would result in a small decrease in impacts to important public scenic views as seen from the “benches” area.

A determination if a 9 percent loss of an existing important public scenic view would result in a “substantial” view reduction is subject to personal interpretation. However, due to the view angle provided from the “benches” area towards the project site, the alternative design residence would be seen as a prominent visual feature within the view corridor. Although the alternative design concept would provide a residence that is similar in size to other homes located along the project site access driveway and El Camino de la Luz, the amount of new structural development placed into the important public scenic view corridor would be substantial. As a result, similar to the proposed project, Alternative Design Concept No. 1 would substantially obstruct important public scenic views provided from the “benches” area, resulting in a significant visual impact.

The significant visual impact of Alternative Design Concept No. 1 could be minimized by providing a design that reduces the visual prominence of the residence within the view corridor. This could be accomplished by reducing the height and overall size of the residence so that it becomes less visually prominent within the view corridor. Such a change could be feasibly implemented by revising the design so that:

- The maximum height of the structure’s eastern elevation (the down-slope side of the residence that would extend furthest into the view corridor) does not exceed 25 feet measured from existing grade.
- The maximum height of the structure’s west elevation does not exceed 15 feet measured from existing grade.

The 15- and 25-foot building height limitations accommodate the existing sloping conditions of the project site by allowing the eastern (downslope) elevation of the residence to be taller than the western (upslope) elevation. The proposed height limitations would require that the third level of the alternative design residence be omitted. This would reduce the livable floor area of the structure to approximately 1,743 square feet, which is still more floor area than would be provided by the proposed project. A new residence on the project site that substantially complies with the suggested design criteria would reduce view obstruction impacts to the “benches” area view corridor to a less than significant level by reducing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure

below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Therefore, potentially significant visual impacts to the important public scenic views provided from the “benches” area would be a **significant but mitigable impact (Class II)**.

Similar to the proposed project, landscape materials that could be planted in conjunction with the development of a project similar to Alternative Design Concept No. 1 would have the potential to result in significant view blockage impacts as the landscaping reaches a mature height. Potentially significant landscape-related visual impacts could feasibly be **reduced to a less than significant level (Class II)** by requiring that landscape screen materials be provided that would not reach a mature height that exceeds the height of the residence.

*Southern Lawn Area.* A simulation of post-development visual conditions as would be seen from the southern lawn area of La Mesa Park after the development of Alternative Design Concept No. 1 is provided on Figure 8.2-8. As seen from the southern lawn area, the alternative design residence would block approximately five (5) percent of the ocean view that is presently provided. This is a slight (two percent) reduction in ocean view obstruction when compared to the proposed project. The alternative design residence would be visible from the southern lawn area, but would not dominate or appear to prominently extend into the existing view corridor. Therefore, as seen from the southern lawn area of the park, the alternative design project would result in a **less than significant (Class III)** visual impact. After the implementation of the design revisions identified for impacts to visual conditions as seen from the “benches” area, view impacts to the southern lawn area would be even further reduced.

*Lighthouse Creek Footbridge.* A simulation of post- development visual conditions as would be seen from a view point at the eastern end of the footbridge after the development of Alternative Design Concept No. 1 is provided on Figure 8.2-9. As seen from the eastern end of the footbridge, the alternative design residence would be prominently visible in the western portion of the view corridor and approximately 14 percent of the existing ocean view would be blocked. This is a slight (one percent) reduction in ocean view obstruction when compared to the proposed project. Additionally, the flat roof of the upper portion of the structure would be seen as slightly extending above the horizon.

From the eastern end of the bridge, the northern and eastern elevations of the alternative design residence would be seen as encroaching into the existing view corridor, and the residence would be a prominent visual feature. Similar to the proposed project, the upper level of the house would be seen as extending above the horizon, which would adversely increase the visual prominence of the structure. Therefore, the alternative design residence would substantially block important public scenic views provided from the eastern end of the Lighthouse Creek footbridge, resulting in a significant visual impact. Similar to views of the project site as seen from the “benches” area,





Source: Hochhauser Blatter, 2006

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**Figure 8.2-8**

Alternative Design Concept No. 1 Photo-Simulation: La Mesa Park Southern Lawn Area

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Source: Hochhauser Blatter, 2006

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**Figure 8.2-9**

Alternative Design Concept No. 1 Photo-Simulation: Eastern End of the Lighthouse Creek Bridge

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potentially significant visual impacts to the important public scenic views provided from the eastern end of the footbridge could be feasibly **reduced to a less than significant level (Class II)** by requiring design changes that minimize the structure's encroachment into the view corridor.

Meigs Road. Views of the project site provided from the southbound lane of Meigs Road are limited in term of site visibility and duration. Similar to the proposed project, the Alternative Design Concept No. 1 residence would be visible from Meigs Road, but would not prominently extend into the view corridor that is provided across the park. As a result, the proposed structure could be overlooked by automobile passengers and would not substantially block important public scenic ocean views that can be provided from this view point. Therefore, the alternative design project would result in a **less than significant (Class III)** visual impact as seen from Meigs Road.

Other Views. Similar to the proposed project, the upper portions of the Alternative Design Concept No. 1 residence would be partially visible from the beach area south of the project site, although it is likely that the visibility of the alternative structure would be somewhat reduced. The visible portions of the alternative structure would be outlined against the sky and would not block any important public scenic views.

Development of Alternative Design Concept No. 1 would have the potential to impair existing ocean views that are presently available to the house directly north of the project site, although the amount of view that is blocked may be slightly reduced because the upper portion of the alternative design residence would be reduced in size when compared to the upper level of the proposed project. Therefore, the alternative design would result in a **less than significant (Class III)** visual impact as seen from other viewing locations in the project area.

***Threshold A-3.*** *Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially impairing the visual context of the area.*

The development of a residence on the project site is a land use allowed by the existing project site zoning, and the Alternative Design Concept No. 1 residence would be developed consistent with most zoning regulation requirements. Similar to the proposed project, a modification to allow construction of a new residence on a lot without the required 60-foot frontage on a public street would be required, however, such a modification would not impair the visual context of the project area.

Alternative Design Concept No. 1 would result in the development of a new residence on a presently vacant parcel, and the residence would be visible within view corridors provided from the "benches" and southern lawn areas of La Mesa Park, and the footbridge over Lighthouse Creek. The existing houses located along the east side of the project site driveway are prominently visible from the "benches" area and the Lighthouse

Creek footbridge. From the southern lawn area of La Mesa Park, however, the houses are predominately screened from view by dense vegetation. Views of the project site and the proposed new residence from the “benches” area and from the footbridge would be consistent with the visual context of the surrounding area because other houses are clearly visible from those view points. Although the existing homes are generally screened from public views provided from the southern lawn area of La Mesa Park, views of the proposed residence from the lawn area would be consistent with the urban context of the project area. Therefore, the use of the project site to develop a new residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The size of the proposed residence would generally be similar to other residences located along El Camino de la Luz and the project site driveway, and the proposed architectural style would be compatible with the surrounding neighborhood. As a result, the Alternative 1 would not substantially impair the visual context of existing important public scenic views and would result in a **less than significant (Class III)** impact.

The use of the project site to develop the alternative design residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The size of the alternative design residence would generally be similar to other residences located along El Camino de la Luz and the project site driveway, and the development of a residence with a configuration that is generally similar to the structure evaluated by this alternative would be compatible with the surrounding neighborhood. As a result, a structure that is consistent with the design parameters evaluated by Alternative Design Concept No. 1 would not substantially impair the visual context of important public scenic views and would result in a **less than significant (Class III)** impact.

### 8.2.3 Geology

***Threshold B.** Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.*

**Landslides.** The 2011 slope stability analysis described in Section 5.1 of this EIR evaluated the potential for the proposed project to be adversely affected by slope stability impacts. That analysis determined that the project site slope would remain stable after the implementation of the proposed project, and that conclusion was in part based on an assumption regarding the largest building that could be developed on the building envelope identified by proposed mitigation measure AES-1a and that is depicted on Figure 5.1-10. The 2011 slope stability analysis also indicated that while unlikely to occur, a substantial increase in groundwater beneath the project site would have the potential to result in a significant slope stability impact. This **significant but mitigable (Class II)** impact could be feasibly reduced to a less than significant level by implementing proposed mitigation measure GEO-1a, which requires the installation of an appropriate storm water collection system on the project site. Other proposed mitigation

measures, including BIO-1 and BIO-2, would minimize the use of landscape irrigation on the project site.

A residence that could be developed on the project site consistent with the design principles provided by Alternative 1 would have a floor area that is approximately 700 square feet larger than the floor area provided by the proposed project. However, in terms of adding structural weight to the project site, any additional weight associated with the additional floor area provided by Alternative 1 residence would be offset by grading required to implement this alternative. The design of Alternative 1 requires the removal of 550 cubic yards of soil material. The weight of the removed soil would be greater than the weight of the additional building area provided by the alternative design. Therefore, similar to the proposed project, the potential slope stability impacts of Alternative 1 would be **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measures GEO-1a.

**Seacliff Retreat.** An analysis of how sea cliff erosion could affect the project site was provided by the 2011 slope stability analysis and was based on the methodology used by the Coastal Commission. This methodology considers the rate of marine erosion over a 75-year project life and existing slope stability characteristics. The seacliff retreat analysis concluded that marine erosion would cause the slope stability factor of safety at the project site to drop below 1.5 (indicating potentially unstable slope conditions) when marine erosion has proceeded 60 feet shoreward from existing conditions and formed a bluff 60 feet high. As depicted on Figure 5 of Appendix C, the existing project site bluff face is approximately 40 feet in height. With a current average rate of sea cliff erosion of approximately four inches per year, potentially unstable bluff conditions would be expected to occur in about 180 years. Based on these estimates, the 180-year period for potentially unstable slope conditions to develop is almost 2.5 times the 75-year project life standard used by the City of Santa Barbara. Therefore, seacliff retreat impacts would be **less than significant (Class III)**.

**Subsidence.** Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. A proposed mitigation measure requires that the alternative design project provide an appropriate structure foundation. Similar to the proposed project, potential subsidence impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measure GEO-2a.

**Expansive Soils.** An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact can be reduced to a less than significant level by the use of a caisson foundation rather than footings. A proposed mitigation measure requires that the alternative design project provide an appropriate structure foundation approved by a licensed Engineering Geologist or Geotechnical Engineer. Similar to the proposed project, potential expansive

soil impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measure GEO-2a.

***Threshold C.** Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.*

Implementation of Alternative Design Concept No. 1 would require approximately 550 cubic yards of grading to implement the building design. The average slope of the proposed building area is approximately 20%, however, the amount of grading that has been proposed would not be extensive. The grading that would be required to implement Alternative Design Concept No. 1 would, however, occur adjacent to Lighthouse Creek, therefore, the required ground disturbance would have the potential to result in a significant short-term erosion impact. This potential impact would be minimized by preparing and implementing an on-site erosion control plan that implements the requirements of Building and Safety Division's Erosion/Sedimentation Control Policy. Compliance with these policy requirements would reduce potential short-term erosion-related impacts and no additional mitigation measures would be required. Therefore, potential grading impacts would be **less than significant (Class III)**. The narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load.

It is anticipated that similar to the proposed project, runoff water on the project site would be collected by a series of catch basins and conveyed by underground pipes to a proposed discharge point located in the Lighthouse Creek channel. A rip-rap energy dissipater would be provided at the proposed discharge location to minimize potential erosion impacts. Therefore, potential long-term erosion impacts resulting from project site runoff would be **less than significant (Class III)**.

#### **8.2.4 Mitigation Measures**

##### **Aesthetics**

Implementation of the following mitigation measures would reduce the aesthetic impacts of a project similar to Alternative Design Concept No. 1 to a less than significant level.

**AES-1. As presently designed, Alternative Design Concept No. 1 would have the potential to substantially obstruct existing ocean views provided from important public view points, including views provided from the "benches" area of La Mesa Park and the eastern end of the Lighthouse Creek footbridge.**

**AES-1a. Revised Project Design.** Revised project design plans shall be provided to the Single Family Design Board for review and



approval. The revised project plans shall implement the following design measures:

- 1a.1 Based on the building footprint area depicted for this alternative project design, the maximum height of the structure's east elevation shall not exceed 25 feet, as measured from existing grade.
- 1a.2. Based on the building footprint area depicted for this alternative project design, the maximum height of the structure's west elevation shall not exceed 15 feet measured from existing grade.

**AES-2. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.**

**AES-2a. Color Approval.** Proposed paint and material colors to be used on the residence shall be approved by the Single Family Design Board. Building colors shall consist of neutral or earth-tone colors. Subsequent color changes proposed for the residence shall be approved by the Single Family Design Board.

**AES-3 Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.**

**AES-3a. Landscape Plan Review.** Proposed landscape planting materials shall be approved by the Single Family Design Board. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature, will not attain a height that exceeds the height of the residence.

**Geology**

Implementation of the following mitigation measures would reduce potential slope stability and soil-related impacts of the alternative design project to a less than significant level.

**GEO-1 An inadequate drainage system on the project site would have the potential to result in a significant slope stability impact.**

**GEO-1a. Drainage System Requirements.** All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to Lighthouse Creek. Landscaping shall be designed to use native species that do not require irrigation except for their

propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

**GEO-2 The proposed project has the potential to be affected by subsidence and expansive soil impacts.**

**GEO-2a Foundation Design Approval.** The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

## **8.2.5 Plans and Policies Analysis**

### **Coastal Act and Local Coastal Plan Policies**

*California Coastal Act Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Potentially Consistent with Proposed Mitigation Measures. Alternative Design Concept No. 1 would not adversely affect public views along the ocean. This alternative would result in a slight decrease in the obstruction of important public scenic views when compared to the proposed project, but would still substantially block existing ocean views from public view points. Therefore, the alternative would be inconsistent with the requirements of this policy. Proposed mitigation measures for this alternative require that the residence design be modified so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Single Family Design Board. A new residence on the project site that substantially complies with the design criteria suggested by Alternative Design Concept No. 1 and proposed mitigation measures would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the alternative design and mitigation measures would help provide consistency with the view protection requirements of this policy.

***Policy 2.1.** Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

Potentially Consistent. The project site provides an access path down the bluff to the beach, however, the existing pathway is not a public beach access. Implementation of this alternative would not result in alterations to the existing beach access pathway.

***Policy 5.3.*** *New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

Potentially Consistent. As described above in Section 8.2.2 (Threshold A-1), the size and general appearance of Alternative Design Concept No. 1 would be consistent with existing development located along the project site access driveway and El Camino de la Luz. Two parking spaces would be provided on the project site consistent with zoning requirements. Therefore, this alternative would not overburden public on-street parking resources. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure T-1, which requires that the project applicant provide evidence of adequate and legal access to the project site. Compliance with the requirements of this mitigation measure would also make the alternative project design project consistent with the access requirements of this policy.

***Policy 6.8.*** *The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

Potentially Consistent. Similar to the proposed project, Alternative Design Concept No. 1 would provide a 25-foot setback from the top of bank for Lighthouse Creek, which is located along the eastern perimeter of the project site. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure W-1, which requires approval of project plans for grading, drainage, stormwater facilities and project development to ensure that potential construction-related and long-term runoff, erosion and other water quality impacts are reduced to a less than significant level. The implementation of adopted City standards and construction site requirements, such as the Building and Safety Division's Erosion/Sedimentation Control Policy and Storm Water Management Plan, would reduce the potential for erosion, sedimentation and other discharges to the creek and provide consistency with the requirements of this policy.

***Policy 8.1.*** *All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.*

Potentially Consistent. Similar to the proposed project, site runoff and water that flows onto the project site from the adjacent street would be collected by a series of catch

basins and would be conveyed by underground pipes to a new discharge located in Lighthouse Creek. The collected water would then flow a short distance to the creek's terminus and would be discharged to the ocean. Due to the topography of the project site and the area to the north, landward drainage of project site runoff would not be feasible. This alternative would not result any drainage structures or improvements on the bluff face.

***Policy 8.2.*** *With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...*

Potentially Consistent. An informal access path down is located on the project site down the bluff face. Alternative Design Concept No. 1 would not result in any alterations to the existing beach access pathway.

***Policy 9.1.*** *The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

Potentially Consistent with Proposed Mitigation Measures. Alternative Design Concept No. 1 would not adversely affect public views along the ocean. This alternative would result in a slight decrease in the obstruction of important public scenic views when compared to the proposed project, but would still substantially block existing ocean views from public view points. Therefore, the alternative would be inconsistent with the requirements of this policy. Proposed mitigation measures for this alternative require that the residence design be modified so that the size and height of the structure is reduced, and that proposed building colors and landscape materials be reviewed and approved by the Single Family Design Board. A new residence on the project site that substantially complies with the design criteria suggested by Alternative Design Concept No. 1 and proposed mitigation measures would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the alternative design and mitigation measures would help to provide consistency with the view protection requirements of this policy.

## **General Plan Policies**

***Conservation Element: Visual Resources Policy 2.0.*** *Development on hillsides shall not significantly modify the natural topography and vegetation.*

Potentially Consistent. The development of a residence consistent with the design parameters of Alternative Design Concept No. 1 would require approximately 550 cubic yards of grading, which would be an increase when compared to the minimal amount of grading required by the proposed project. Grading required to implement this alternative, however, would not significantly alter the topography of the project site or remove a substantial amount of vegetation. The narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is

anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load.

***Conservation Element: Visual Resources Policy 3.0.*** *New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.*

Potentially Consistent with Proposed Mitigation Measures. Alternative Design Concept No. 1 would result in decreased obstructions of ocean views from important view locations when compared to the proposed project, but would still substantially block existing ocean views. The important public scenic views of concern include the “benches” and lawn areas located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. Therefore, this alternative would be inconsistent with the requirements of this policy. Proposed mitigation measures require that the alternative residence design be modified so that its size and height are reduced, and that proposed building colors and landscape materials be reviewed and approved by the Single Family Design Board. Implementation of the proposed mitigation measures would minimize the view obstruction associated with this alternative.

***Conservation Element: Visual Resources Policy 6.0.*** *Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.*

Potentially Consistent. The project site is not located on a ridgeline and would not be visible from large areas of the community. As described above in Section 8.2.2 (Threshold A-2, Other Views), Alternative Design Concept No. 1 would not result in significant view-related impacts as seen from the beach area that is south of and adjacent to the project site.

***Single Family Residence Design Guidelines.*** The Single Family Residence Design Guidelines provide a variety of measures to blend homes into the natural surroundings and to reduce the “apparent height” (the lowest point of contact with grade to the highest point of the building dimension) of the structure. Prescribed measures applicable to the proposed project are listed below:

- 27.1 Balance stepping the building up or down the hill with avoiding excessive spill down.
- 27.2 Balance setting the building into the hillside with minimizing grading.
- 27.3 Avoid large continuous paved areas. Paved areas should be broken up by using colored or textured materials.

- 27.4 Natural earth tone colors that blend with the surrounding topography and vegetation are encouraged.
- 27.5 Fit in with hillside topography and background
- 27.6 Avoid interrupting natural ridgelines and skylines. Set the house below these.
- 27.7 Use landscaping to blend the structure with the environment.
- 27.8 Use materials and colors to reduce the apparent bulk.
- 27.9 Minimize exposed foundations and undersides of structures (e.g., underside of buildings or decks).
- 27.8 Avoid these design mistakes which raise both aesthetic and fire safety concerns:
  - Exposed underfloor areas
  - Large downhill cantilevers
  - Tall support columns for overhanging areas
- 29.1 Homes with an apparent height less than 30 feet are preferable. Design review boards will carefully consider appropriateness of homes exceeding an apparent height of 30 feet.
- 29.2 Although the Municipal Code height limit is 30 feet in single family residential zones, appropriate hillside project proposals usually have a height of 25 feet or less, especially where the slope is less than 25%.

Potentially Consistent with Proposed Mitigation Measures. As depicted on Figures 8.2-2 and 3 (Alternative Design Concept No. 1 building elevations), the alternative design would implement many of the Design Guideline recommendations for residences located on sloping (hillside) lots. Specifically, the alternative project design would set the structure into the sloping portion of the proposed building site; the building would be stepped down the building site slope; most site grading would occur under the structure and the area to be graded would be minimized; decks that extend from the structure would be located on-grade or near the ground surface to minimize views of the underside of the deck, and the appearance of foundation walls has been minimized. The “apparent height” of the alternative design residence, however, would exceed 25 feet as the structure’s eastern elevation would have an apparent height of 35 feet. Implementation of proposed mitigation measure AES-1.a.1, which requires that the height of the building not exceed 25 feet as measured above existing grade, would reduce the overall height of the structure and facilitate compliance with the adopted design guidelines.

### **8.3 ALTERNATIVE DESIGN CONCEPT No. 2**

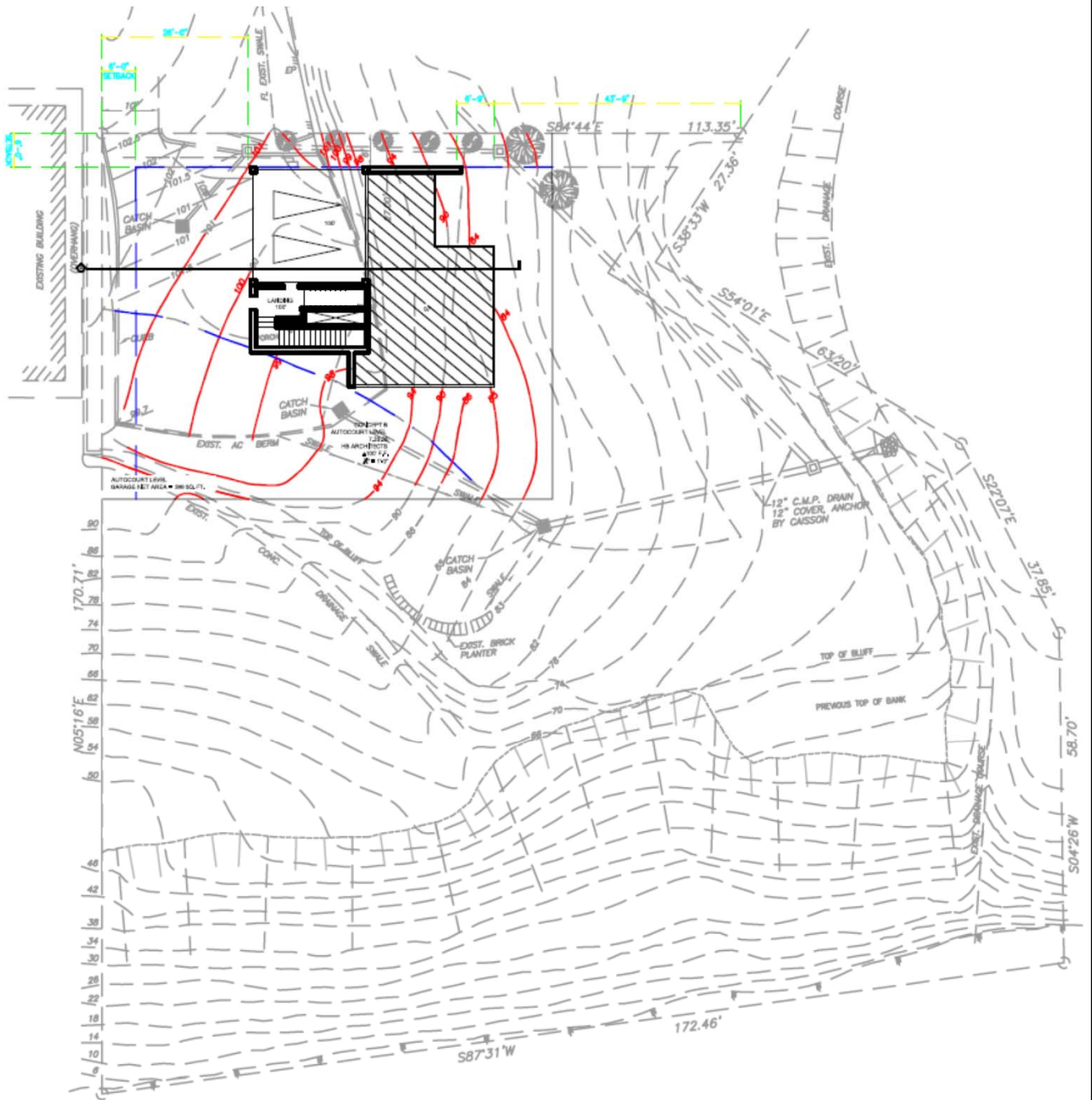
#### **8.3.1 Alternative Description.**

It is the objective of Alternative Design Concept No. 2 to minimize project-related aesthetic impacts by considering a revised project design for a new residence that is smaller than the proposed project. Design concepts used by this alternative include lowering the finished floor elevation of the structure's bottom level by excavating the building footprint area, and reducing the size of the structure.

A site plan for Alternative Design Concept No. 2 is provided on Figure 8.3-1, and design concept elevations depicting the proposed residence are provided on Figures 8.3-2 and 3. Conceptual floor plan layouts and a cross section through the residence are provided on Figures 8.3-4 and 5. Alternative Design Concept No. 2 would be a two-level residence that provides approximately 1,204 square feet of livable floor area. The square footage provided on each floor level is summarized on Table 8.3-1.

**Table 8.3-1  
Alternative Design Concept No. 2  
Residence Size Summary**

	<b>Alternative Design Concept No. 2</b>	<b>Proposed Project</b>
Garage Level Livable Area	0	893 sq. ft
Lower Level Livable Area	1,204	606 sq. ft.
Total Liveable Floor Area	1,204	1,499 sq. ft.
Garage Area	400	443 sq. ft.
Total Floor Area	1,604	1,942 sq. ft



Source: Hochhauser Blatter, 2006

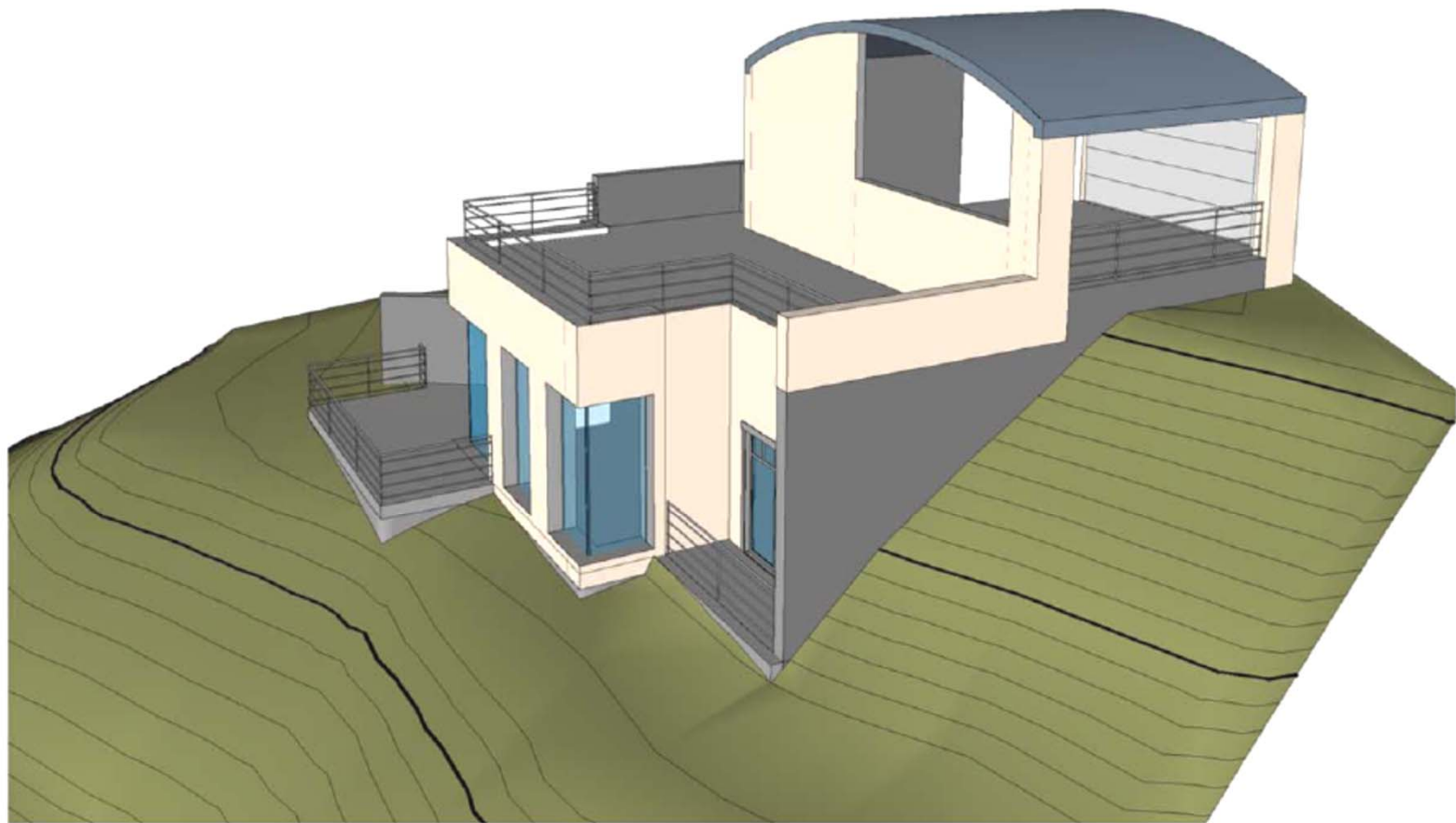
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Figure 8.3-1

Alternative Design Concept No. 2 – Site Plan





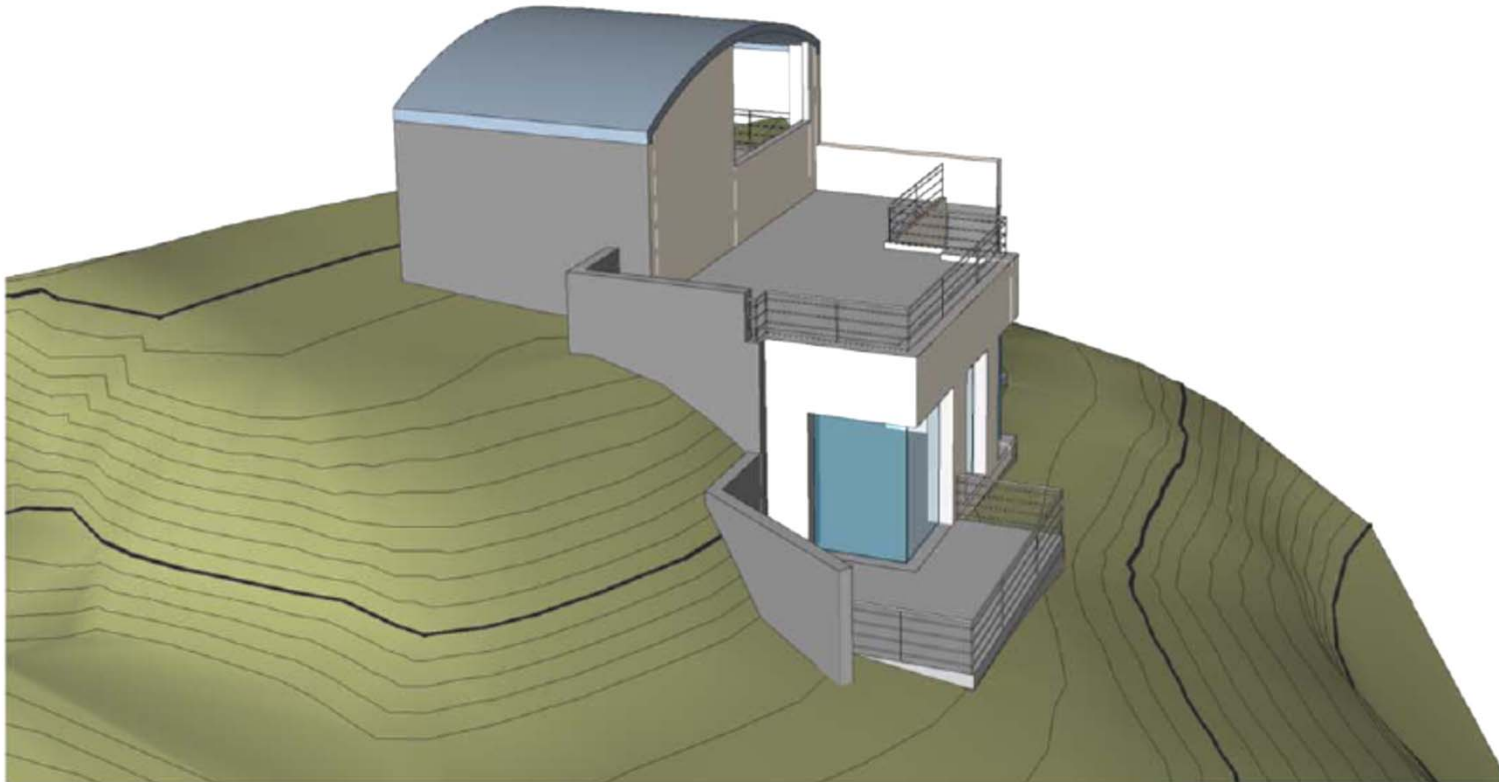
Source: Hochhauser Blatter, 2006

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**Figure 8.3-2**

Alternative Design Concept No. 2 – View From the Northeast



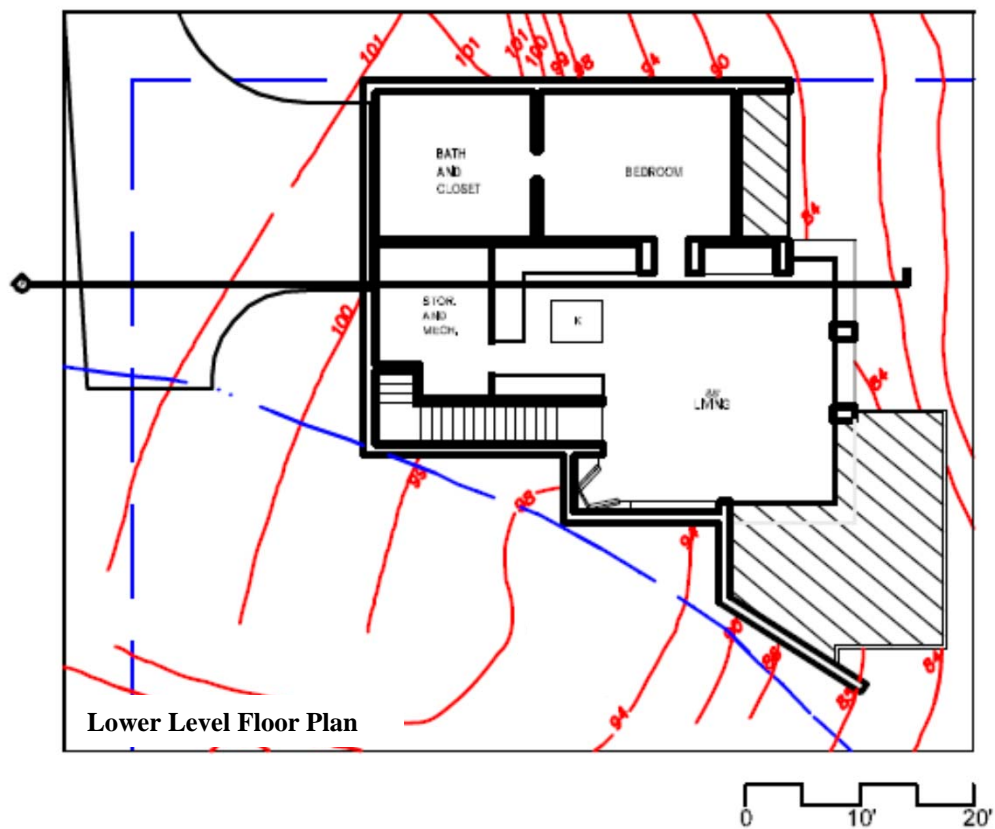
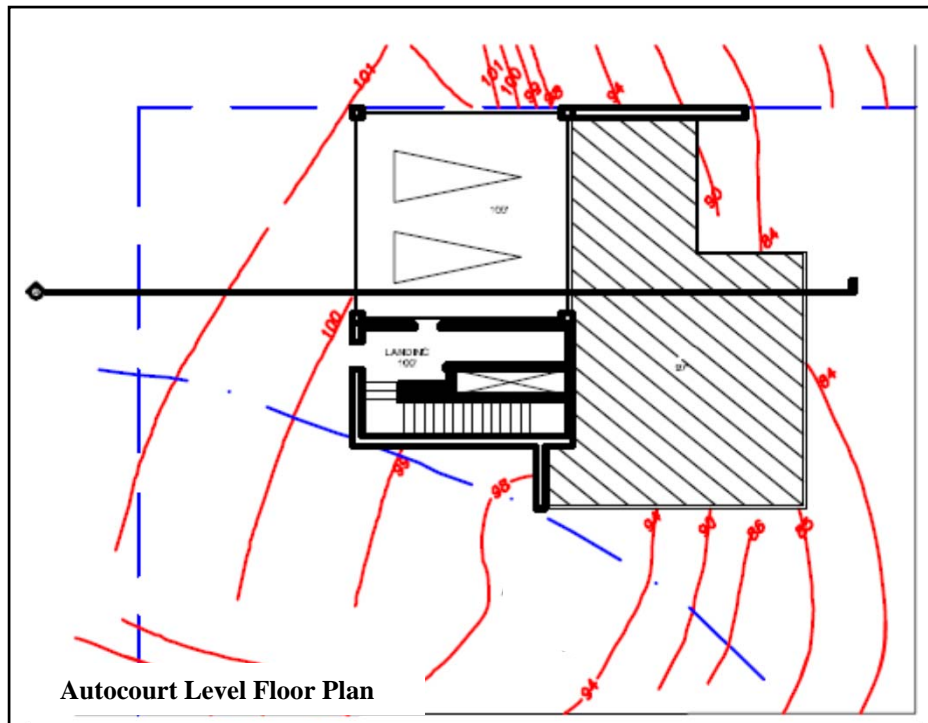
Source: Hochhauser Blatter, 2006

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**Figure 8.3-3**

Alternative Design Concept No. 2 – View From the Southeast



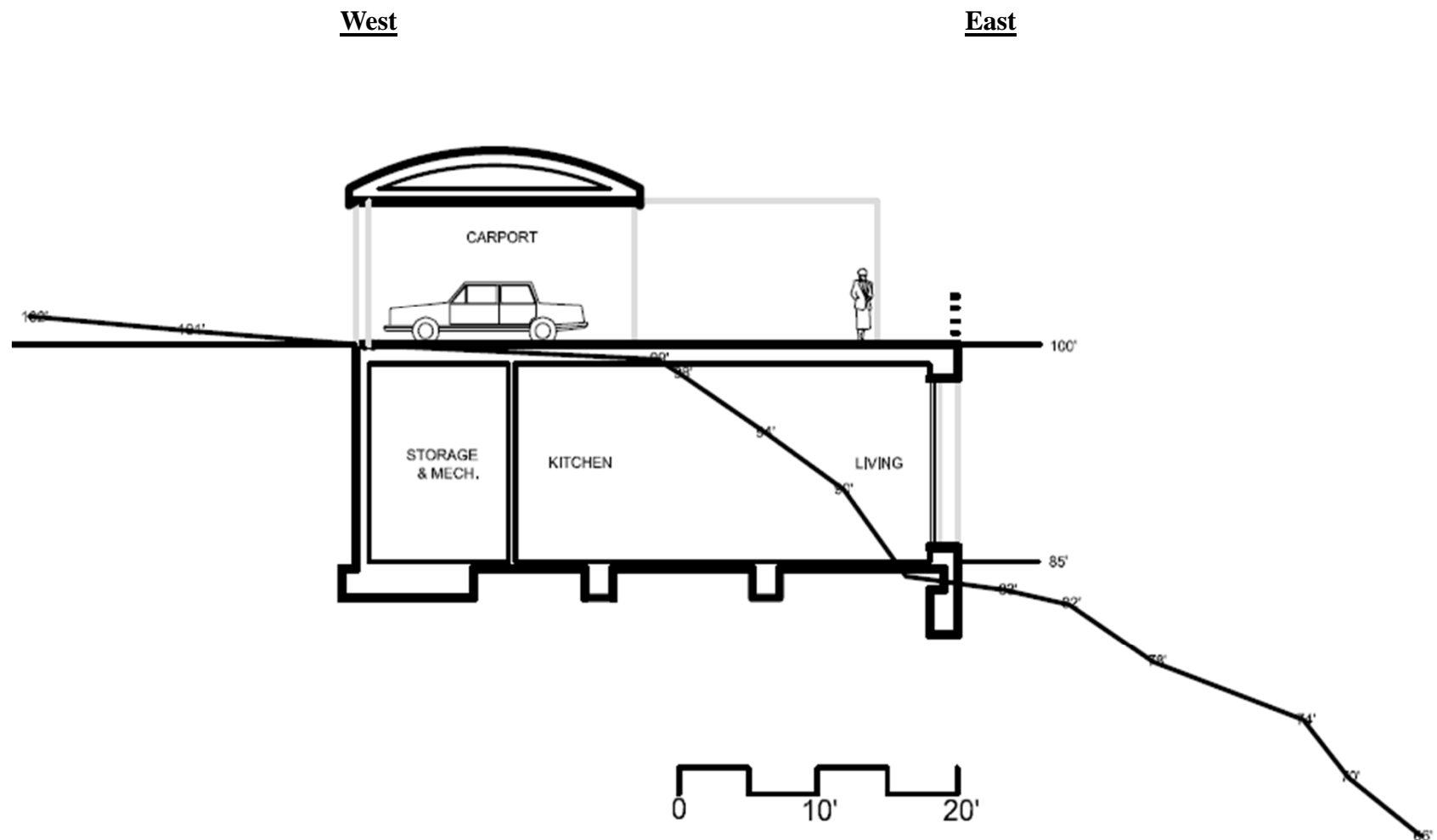
Source: Hochhauser Blatter, 2006

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**Figure 8.3-4**

Alternative Design Concept No. 2 – Floor Plans



Source: Hochhauser Blatter, 2006

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Figure 8.3-5

Alternative Design Concept No. 2 – Cross Section

The finished floor elevation of the structure's lower level would be developed below the existing grade of the project site. As depicted on the cross-section provided by Figure 8.3-5, the maximum depth of excavation would be approximately 15 feet. Approximately 500 cubic yards of grading would be required to implement this alternative design concept. The eastern perimeter wall of the structure would have a height of approximately 15 feet above existing grade, while the east elevation of the structure would have a total height of approximately 28 feet. The western elevation of the structure would have a height of approximately 13 feet above existing grade.

The concept drawings for Alternative No. 2 show the parking level of the structure as providing a carport with an arched roof. The alternative could also be implemented with an enclosed garage. Providing the carport/garage with a flat roof could reduce the overall height of the eastern and western elevations to 25 and 10 feet, respectively.

Alternative Design Concept No. 2 places the residence in the same portion of the project site as the proposed project. Setbacks from the top of the ocean bluff, top of bank for Lighthouse Creek, and from adjacent property lines would be generally similar to the setbacks provided by the proposed project.

### 8.3.2 Aesthetics

***Threshold A-1.*** *Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially degrading an important public scenic view.*

Alternative Design Concept No. 2 would provide approximately 1,204 square feet of livable floor area, which is approximately 295 fewer square feet than the proposed project. The decrease in livable building area resulted from a reduction in the amount of development above existing grade, and providing the liveable square footage area on the structure's lowest level. Based on field observations, the size of the alternative design residence would be similar to other residences located along the project site access driveway and El Camino de la Luz, and the multi-level design would also be consistent with existing residences. Therefore, the size of Alternative Design Concept No. 2 would not be out of character with the surrounding neighborhood and the three important public scenic views in the project area would not be substantially degraded as a result of the size of alternative project. The building size-related impacts associated with this alternative would be **less than significant (Class III)**.

The use of neutral or earth-tone colors on the exterior of the residence would minimize the potential for the structure to be out of character with surrounding development, and would be consistent with other visual elements located in the three important public scenic views in the vicinity of the project site. Potentially significant impacts that may result from the use of exterior colors that are incompatible with the surrounding neighborhood could be **significant but mitigable (Class II)** and reduced to a

less than significant level by requiring ABR approval of proposed colors and future building color changes.

Alternative Design Concept No. 2 would substantially reduce the use of understory walls to facilitate the development of the residence on the sloping, building area portion of the project site. This would be accomplished by placing the lower level of the structure below existing grade. Therefore, potentially significant visual impacts resulting from the use of understory walls would be **less than significant (Class III)** and no additional mitigation measures would be required.

The development of Alternative Design Concept No. 2 would require approximately 500 cubic yards of grading. Earthwork required to implement this alternative would not substantially alter the appearance of the project parcel as seen from off-site locations. After construction activities are complete, no ground disturbance areas would be visible. Vegetation located on the building pad area and adjacent to the building pad consists primarily of weedy plant species. The removal of those plants would not result in a substantial alteration to the appearance of the project site. Therefore, similar to the proposed project, grading and vegetation removal required to develop the alternative design project would not substantially degrade views provided from the three important public scenic view points in the project area and would be a **less than significant impact (Class III)**.

***Threshold A-2.** Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially blocking an important public scenic view corridor.*

La Mesa Park. Areas of La Mesa Park that provide public views of the project site and ocean include the “benches” area near the southern end of the park, and the southern portion of the park’s lawn area.

*“Benches” Area.* A simulation of post-development visual conditions as would be seen from the “benches” area after the development of Alternative Design Concept No. 2 is provided on Figure 8.3-6. Due to the view perspective provided from the “benches” area, most of the northern and eastern elevations of the residence would be visible to persons in the “benches” area of the park. However, due to the reduced size and height of the structure, the residence would not be seen as a prominent visual feature in the “benches” area view corridor. With this alternative design, approximately five (5) percent of the existing view of the ocean water would be blocked, which is approximately one-half of the ocean water view obstruction that would result from the proposed project. Therefore, the alternative design would provide a 295 square foot decrease in livable floor space and would result in a substantial decrease in impacts to ocean views as seen from the “benches” area.

A determination if a five percent loss of an existing important public scenic view would result in a “substantial” view reduction is subject to personal interpretation.

However, due to the reduced amount of building area that would be visible within the view corridor, this alternative has resulted in a considerable reduction in the visibility of the structure within the view corridor. The requirement of a proposed mitigation measure that requires the building's east elevation be reduced to a height that does not exceed 25 feet would further reduce the size and visibility of the structure. A new residence on the project site that substantially complies with the suggested design criteria would reduce view obstruction impacts to the "benches" area view corridor to a less than significant level by reducing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Therefore, with the implementation of proposed mitigation, Alternative Design Concept No. 2 would not substantially obstruct important public scenic views provided from the "benches" area, and the impacts of this alternative would be **significant but mitigable (Class II)**.

Similar to the proposed project, landscape materials that could be planted in conjunction with the development of a project similar to Alternative Design Concept No. 2 would have the potential to result in significant view blockage impacts as the landscaping reaches a mature height. Potentially significant landscape-related visual impacts could feasibly be **reduced to a less than significant level (Class II)** by requiring that landscape screen materials be provided that would not reach a mature height that exceeds the height of the residence.

*Southern Lawn Area.* A simulation of post-development visual conditions as would be seen from the southern lawn area of La Mesa Park after the development of Alternative Design Concept No. 2 is provided on Figure 8.3-7. As seen from the southern lawn area, the alternative design residence would block approximately three (3) percent of the ocean view that is presently provided, which is less than one-half of the ocean water view obstruction that would result from the proposed project. The alternative design residence would be visible from the southern lawn area, but would not dominate or appear to prominently extend into the existing view corridor. Therefore, as seen from the southern lawn area of the park, the alternative design project would result in a **less than significant** visual impact (**Class III**).

Lighthouse Creek Footbridge. A simulation of post- development visual conditions as would be seen from a view point at the eastern end of the footbridge after the development of Alternative Design Concept No. 2 is provided on Figure 8.3-8. As seen from the eastern end of the footbridge, the alternative design residence would be visible in the western portion of the view corridor, however, the project would only block approximately six (6) percent of the existing ocean view that is currently provided. This would be less than one-half of the view obstruction that would result from the proposed

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Source: Hochhauser Blatter, 2006

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**Figure 8.3-6**

Alternative Design Concept No. 2 Photo-Simulation: La Mesa Park “Benches” Area

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Source: Hochhauser Blatter, 2006

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**Figure 8.3-7**

Alternative Design Concept No. 2 Photo-Simulation: La Mesa Park Southern Lawn Area

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Source: Hochhauser Blatter, 2006

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**Figure 8.3-8**

Alternative Design Concept No. 2 Photo-Simulation: Eastern End of the Lighthouse Creek Bridge

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project. In contrast to the proposed project and Alternative Design Concept No. 1, the roof of the upper portion of this alternative design structure would not be seen as extending above the horizon. The visibility of the alternative design structure would be further reduced with the implementation of a proposed mitigation measure that requires the total height of the eastern elevation not exceed 25 feet. Therefore, with the implementation of proposed mitigation, Alternative Design Concept No. 2 would not substantially obstruct the existing important public scenic views provided from the “benches” area, and the impacts of the alternative would be **significant but mitigable (Class II)**.

Meigs Road. Views of the project site provided from the southbound lane of Meigs Road are limited in term of site visibility and duration. Similar to the proposed project, the Alternative Design Concept No. 2 residence would be visible from Meigs Road, but would not prominently extend into the ocean view corridor that is provided across the park. As a result, the structure could be overlooked by automobile passengers and would not substantially block important public scenic ocean views that can be provided from this view point. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact as seen from Meigs Road.

Other Views. The Alternative Design Concept No. 2 residence would have a maximum height above existing grade of approximately 28 feet, which would be substantially lower than the 35-foot maximum height of the proposed project. Therefore, visibility of the alternative design structure as seen from the beach area south of the project site would be reduced, and it is likely that the structure would not be visible from the beach.

Development of Alternative Design Concept No. 2 would have the potential to impair existing ocean views that are presently available to the house directly north of the project site, although the amount of view that is blocked would be reduced by this alternative because the upper portion of the alternative design residence would be reduced in size when compared to the upper level of the proposed project. Therefore, the proposed project would not result in a **less than significant (Class III)** visual impact as seen from other viewing locations in the project area.

***Threshold A-3. Alter or obstruct existing public viewsheds from or across the project site, including scenic features associated with designated scenic highways, by substantially impairing the visual context of the area.***

The development of a residence on the project site is a land use allowed by the existing project site zoning, and the Alternative Design Concept No. 2 residence would be developed consistent with most zoning regulation requirements. Similar to the proposed project, a modification to allow construction of a new residence on a lot without the required 60-foot frontage on a public street would be required, however, such a modification would not impair the visual context of the project area.

Alternative Design Concept No. 2 would result in the development of a new residence on a presently vacant parcel, and the residence would be visible within view corridors provided from the “benches area and southern lawn area of La Mesa Park, and the footbridge over Lighthouse Creek). The existing houses located along the east side of the project site access driveway are prominently visible from the “benches” area and the Lighthouse Creek footbridge. From the southern lawn area of La Mesa Park, however, the houses are predominately screened from view by dense vegetation. Views of the project site and the proposed new residence from the “benches” area and from the footbridge would be consistent with the visual context of the surrounding area because other houses are clearly visible from those view points. Although the existing homes are generally screened from public views provided from the southern lawn area of La Mesa Park, views of the proposed residence from the lawn area would be consistent with the urban context of the project area. Therefore, the use of the project site to develop a new residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The size of the proposed residence would generally be similar to other residences located along the east side of the project site driveway and El Camino de la Luz, and the proposed architectural style would be compatible with the surrounding neighborhood. As a result, the Alternative 2 would not substantially impair the visual context of existing important public scenic views and would result in a **less than significant (Class III)** impact.

The use of the project site to develop the alternative design residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The alternative design residence would generally appear to be smaller than other residences located along El Camino de la Luz and the project site driveway, and the development of a residence with a configuration that is generally similar to the structure evaluated by this alternative would be compatible with the surrounding neighborhood. As a result, a structure that is consistent with the design parameters evaluated by Alternative Design Concept No. 2 would not substantially impair the visual context of the views presently provided from the important view corridors and other project site viewing locations in the project area and would result in a **less than significant (Class III)** impact.

### 8.3.3 Geology

***Threshold B.** Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.*

**Landslides.** The 2011 slope stability analysis described in Section 5.1 of this EIR evaluated the potential for the proposed project to be adversely affected by slope stability impacts. That analysis determined that the project site slope would remain stable after the implementation of the proposed project, and that conclusion was in part based on an assumption regarding the largest building that could be developed on the building envelope identified by proposed mitigation measure AES-1a and that is depicted on Figure 5.1-10. The 2011 slope stability analysis also indicated that while unlikely to



occur, a substantial increase in groundwater beneath the project site would have the potential to result in a significant slope stability impact. This **significant but mitigable (Class II)** impact could be feasibly reduced to a less than significant level by implementing proposed mitigation measure GEO-1a, which requires the installation of an appropriate storm water collection system on the project site. Other proposed mitigation measures, including BIO-1 and BIO-2, would minimize the use of landscape irrigation on the project site.

A residence that could be developed on the project site consistent with the design principles provided by Alternative 2 would have a floor area that is approximately 300 square feet smaller than the floor area provided by the proposed project. In terms of structural weight on the project site, the Alternative 2 residence would be smaller, and the removal of approximately 500 cubic yards of soil from the project site required to implement this alternative would further reduce the amount of project-related weight on the project site. Therefore, similar to the proposed project, the potential slope stability impacts of Alternative 2 would be **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measures GEO-1a.

**Seacliff Retreat.** An analysis of how sea cliff erosion could affect the project site was provided by the 2011 slope stability analysis and was based on the methodology used by the Coastal Commission. This methodology considers the rate of marine erosion over a 75-year project life and existing slope stability characteristics. The seacliff retreat analysis concluded that marine erosion would cause the slope stability factor of safety at the project site to drop below 1.5 (indicating potentially unstable slope conditions) when marine erosion has proceeded 60 feet shoreward from existing conditions and formed a bluff 60 feet high. As depicted on Figure 5 of Appendix C, the existing project site bluff face is approximately 40 feet in height. With a current average rate of sea cliff erosion of approximately four inches per year, potentially unstable bluff conditions would be expected to occur in about 180 years. Based on these estimates, the 180-year period for potentially unstable slope conditions to develop is almost 2.5 times the 75-year project life standard used by the City of Santa Barbara. Therefore, seacliff retreat impacts would be **less than significant (Class III)**.

**Subsidence.** Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. A proposed mitigation measure requires that the alternative design project provide an appropriate structure foundation. Similar to the proposed project, potential subsidence impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measure GEO-2a.

**Expansive Soils.** An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact

can be reduced to a less than significant level by the use of a caisson foundation rather than footings. A proposed mitigation measure requires that the alternative design project provide an appropriate structure foundation approved by a licensed Engineering Geologist or Geotechnical Engineer. Similar to the proposed project, potential expansive soil impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level with the implementation of proposed mitigation measure GEO-2a.

***Threshold C.** Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.*

Implementation of Alternative Design Concept No. 2 would require approximately 500 cubic yards of grading to implement the building design. The average slope of the proposed building area is approximately 20%, however, the amount of grading that has been proposed would not be extensive. The grading that would be required to implement Alternative Design Concept No. 2 would, however, occur adjacent to Lighthouse Creek, therefore, the required ground disturbance would have the potential to result in a significant short-term erosion impact. This potentially significant impact could be reduced to a less than significant level by preparing and implementing an on-site erosion control plan that implements the requirements of Building and Safety Division's Erosion/Sedimentation Control Policy. Compliance with these requirements would reduce potential short-term erosion-related impacts to a less than significant level and no additional mitigation measures would be required. Therefore, potential grading impacts would be **less than significant (Class III)**. The narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load.

It is anticipated that runoff water on the project site would be collected by a series of catch basins and be conveyed by underground pipes to a proposed discharge point located in the Lighthouse Creek channel. A rip-rap energy dissipater would be provided at the proposed discharge location to minimize potential erosion impacts. Therefore, potential long-term erosion impacts resulting from project site runoff would be **less than significant (Class III)**.

### **8.3.4 Mitigation Measures**

#### **Aesthetics**

Implementation of the following mitigation measures would reduce the aesthetic impacts of a project similar to Alternative Design Concept No. 2 to a less than significant level.

**AES-1. As presently designed, Alternative Design Concept No. 2 would have the potential to substantially obstruct existing ocean views provided from important public points, including views provided from the “benches” area of La Mesa Park and the eastern end of the Lighthouse Creek footbridge.**

**AES-1a. Revised Project Design.** Revised project design plans shall be provided to the Single Family Design Board for review and approval. The revised project plans shall implement the following design measures:

1a.1 The maximum height of the structure’s east elevation shall not exceed 25 feet measured from existing grade.

**AES-2. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.**

**AES-2a. Color Approval.** Proposed paint and material colors to be used on the residence shall be approved by the Single Family Design Board. Building colors shall consist of neutral or earth-tone colors. Subsequent color changes proposed for the residence shall be approved by the Single Family Design Board.

**AES-3 Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.**

**AES-3a. Landscape Plan Review.** Proposed landscape planting materials shall be approved by the Single Family Design Board. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature, will not attain a height that exceeds the height of the residence.

## **Geology**

Implementation of the following mitigation measures would reduce potential slope stability and soil-related impacts of the proposed project to a less than significant level.

**GEO-1 An inadequate drainage system on the project site would have the potential to result in a significant slope stability impact.**

**GEO-1a. Drainage System Requirements.** All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to Lighthouse Creek. Landscaping shall be designed to

use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

**GEO-2 The proposed project has the potential to be affected by subsidence and expansive soil impacts.**

**GEO-2a Foundation Design Approval.** The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

**8.3.5 Plans and Policies Analysis**

**Coastal Act and Local Coastal Plan Policies**

*California Coastal Act Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Potentially Consistent with Proposed Mitigation Measures. Alternative design Concept No. 2 would not adversely affect views along the ocean. This alternative would result in a considerable decrease in the obstruction of ocean views as seen from important view locations when compared to the proposed project. The amount of view obstruction resulting from this alternative could feasibly be reduced to a less than significant level by modifying the design of the residence so that the roof over the carport/garage complies with a proposed mitigation measure that requires the eastern elevation of the structure not exceed a maximum height of 25 feet. Similar to the proposed project, mitigation measures also applicable to this alternative would require that proposed building colors and landscape materials be reviewed and approved by the Single Family Design Board. A new residence on the project site that substantially complies with the design criteria suggested by Alternative Design Concept No. 2 and proposed mitigation measures would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the alternative design and mitigation measures would help provide consistency with the view protection requirements of this policy.

***Policy 2.1.*** *Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

Potentially Consistent. The project site provides an access path down the bluff to the beach, however, the existing pathway is not a public beach access. Implementation of this alternative would not result in alterations to the existing beach access pathway.

***Policy 5.3.*** *New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

Potentially Consistent. As described above in Section 8.3.2 (Threshold A-1), the size and general appearance of Alternative Design Concept No. 2 would be consistent with existing development located along the project site access driveway and El Camino de la Luz. Two parking spaces would be provided on the project site consistent with zoning requirements. Therefore, this alternative would not overburden public on-street parking resources. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure T-1, which requires that the project applicant provide evidence of adequate and legal access to the project site. Compliance with the requirements of this mitigation measure would also make the alternative project design project consistent with the access requirements of this policy.

***Policy 6.8.*** *The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

Potentially Consistent. Similar to the proposed project, Alternative Design Concept No. 2 would provide a 25-foot setback from the top of bank for Lighthouse Creek, which is located along the eastern perimeter of the project site. The Revised Initial Study prepared for the proposed project includes proposed mitigation measure W-1, which requires approval of project plans for grading, drainage, stormwater facilities and project development to ensure that potential construction-related and long-term runoff, erosion and other water quality impacts are reduced to a less than significant level. The implementation of adopted City standards and construction site requirements, such as the Building and Safety Division's Erosion/Sedimentation Control Policy and Storm Water Management Plan, would reduce the potential for erosion, sedimentation and other discharges to the creek and provide consistency with the requirements of this policy.

***Policy 8.1.*** *All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and*

*where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.*

Potentially Consistent. Similar to the proposed project, site runoff and water that flows onto the project site from the adjacent street would be collected by a series of catch basins and would be conveyed by underground pipes to a new discharge located in Lighthouse Creek. The collected water would then flow a short distance to the creek's terminus and would be discharged to the ocean. Due to the topography of the project site and the area to the north, landward drainage of project site runoff would not be feasible. This alternative would not result any drainage structures or improvements on the bluff face.

***Policy 8.2.*** *With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...*

Potentially Consistent. An informal access path is located on the project site bluff face. Alternative Design Concept No. 2 would not result in any alterations to the existing beach access pathway.

***Policy 9.1.*** *The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

Potentially Consistent with Proposed Mitigation Measures. Alternative Design Concept No. 2 would not adversely affect views along the ocean. This alternative would result in a considerable decrease in the obstruction of ocean views as seen from important view points when compared to the proposed project. The amount of view obstruction resulting from this alternative could feasibly be reduced to a less than significant level by modifying the design of the residence so that the roof over the carport/garage complies with a proposed mitigation measure that requires the eastern elevation of the structure not exceed a maximum height of 25 feet. A new residence on the project site that substantially complies with the design criteria suggested by Alternative Design Concept No. 2 and proposed mitigation measures would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the alternative design and mitigation measures would help provide consistency with the view protection requirements of this policy.

## **General Plan Policies**

***Conservation Element: Visual Resources Policy 2.0.*** *Development on hillsides shall not significantly modify the natural topography and vegetation.*

Potentially Consistent. The development of a residence consistent with the design parameters of Alternative Design Concept No. 2 would require approximately 500 cubic yards of grading, which would be an increase when compared to the minimal amount of grading required by the proposed project. Grading required to implement this alternative, however, would not significantly alter the topography of the project site or remove a substantial amount of vegetation. The narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load.

***Conservation Element: Visual Resources Policy 3.0.*** *New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.*

Potentially Consistent with Proposed Mitigation Measures. When compared to the proposed project, Alternative Design Concept No. 2 would result in a considerable decrease in ocean view obstructions as seen from important view locations. The view corridors of concern include the “benches” and lawn area located in the southern end of La Mesa Park, and the area located along the eastern end of the Lighthouse Creek footbridge. The design of this alternative could feasibly be revised to make the project consistent with the requirements of this policy by modifying the design of the roof over the carport/garage portion of the structure so that it complies with a proposed mitigation measure that requires the eastern elevation of the structure be reduced to a maximum height of 25 feet. Similar to the proposed project, mitigation measures for this alternative would also require that proposed building colors and landscape materials be reviewed and approved by the Single Family Design Board. A new residence on the project site that substantially complies with the design criteria suggested by Alternative Design Concept No. 2 and proposed mitigation measures would reduce view obstruction impacts by minimizing the size and height of the residence, reducing the apparent size of the building by placing a portion of the structure below existing grade, and by shifting proposed building mass to the west towards the perimeter of the view corridor. Implementation of the alternative design and mitigation measures would help provide consistency with the view protection requirements of this policy.

***Conservation Element: Visual Resources Policy 6.0.*** *Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.*

Potentially Consistent. The project site is not located on a ridgeline and would not be visible from large areas of the community. As described above in Section 8.3.2 (Threshold A-2, Other Views), Alternative Design Concept No. 2 would not result in significant view-related impacts as seen from the beach area that is south of and adjacent to the project site.

***Single Family Residence Design Guidelines.*** The Single Family Residence Design Guidelines provide a variety of measures to blend homes into the natural surroundings and to reduce the “apparent height” (the lowest point of contact with grade to the highest point of the building dimension) of the structure. Prescribed measures applicable to the proposed project are listed below:

- 27.1 Balance stepping the building up or down the hill with avoiding excessive spill down.
- 27.2 Balance setting the building into the hillside with minimizing grading.
- 27.3 Avoid large continuous paved areas. Paved areas should be broken up by using colored or textured materials.
- 27.4 Natural earth tone colors that blend with the surrounding topography and vegetation are encouraged.
- 27.5 Fit in with hillside topography and background
- 27.6 Avoid interrupting natural ridgelines and skylines. Set the house below these.
- 27.7 Use landscaping to blend the structure with the environment.
- 27.8 Use materials and colors to reduce the apparent bulk.
- 27.9 Minimize exposed foundations and undersides of structures (e.g., underside of buildings or decks).
- 27.8 Avoid these design mistakes which raise both aesthetic and fire safety concerns:
  - Exposed underfloor areas
  - Large downhill cantilevers
  - Tall support columns for overhanging areas
- 29.1 Homes with an apparent height less than 30 feet are preferable. Design review boards will carefully consider appropriateness of homes exceeding an apparent height of 30 feet.
- 29.2 Although the Municipal Code height limit is 30 feet in single family residential zones, appropriate hillside project proposals usually have a height of 25 feet or less, especially where the slope is less than 25%.

Potentially Consistent with Proposed Mitigation Measures. As depicted on Figures 8.3-2 and 3 (Alternative Design Concept No. 2 building elevations), the



alternative design would implement many of the Design Guideline recommendations for residences located on sloping (hillside) lots. Specifically, the alternative project design would set the structure into the sloping portion of the proposed building site; the building would be stepped down the building site slope;; most site grading would occur under the structure and the area to be graded would be minimized; decks that extend from the structure would be located on-grade or near the ground surface to minimize views of the underside of the deck area, and the appearance of foundation walls has been minimized. This alternative design has substantially reduced the “apparent height” of the structure when compared to the proposed project and Alternative Design Concept No. 1. However, the overall height of the east elevation of Alternative Design Concept No. 2 would be approximately 28 feet, which is somewhat higher than the 25-foot recommendation provided by the Design Guidelines. Implementation of proposed mitigation measure AES-1.a.1, which requires that the height of the building not exceed 25 feet measured above existing grade, would reduce the overall height of the structure and facilitate compliance with the adopted design guidelines.

#### **8.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

Table 8.4-1 provides a summary of proposed mitigation measures that would be required to reduce aesthetic and geologic hazard impacts that would result from the proposed project and the alternative project design concepts to a less than significant level. Table 8.4-2 summarizes the potential for each alternative evaluated by this EIR to avoid, or result in reduced, similar or increased environmental impacts when compared to the respective impacts of the proposed project.

Under the “No Project” alternative, the project site would remain in a vacant condition and the potential environmental impacts associated with the proposed project would be avoided. Therefore, the “No Project” alternative is the environmentally superior alternative. However, the “No Project” alternative would not attain any of the proposed projects’ objectives. CEQA Guidelines Section 15126.6(e)(2) indicates that *“if the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”*

The development of a project similar to Alternative Design Concept No. 1 would incrementally reduce aesthetic impacts that would result from the placement of a new structure within important view corridors and the partial obstruction of existing ocean views. The design of this alternative would minimize aesthetic impacts by placing the lower level of the residence below existing grade and reducing the amount structural development on the upper level of the building. However, similar to the proposed project, mitigation measures to reduce the height of the structure’s west elevation to 15 feet and the east elevation to 25 feet would still be required. Implementation of these mitigation measures would require the removal of the structure’s upper level. Also similar to the proposed project, mitigation measures to review and approve building colors and landscape materials would also be required. Implementation of the

recommended mitigation measures would reduce potential aesthetic impacts to a less than significant level.

Similar to the proposed project, potential slope stability impacts would be reduced to a less than significant level by providing an appropriate storm water collection system on the project site. Grading would be increased under this alternative, but also similar to the proposed project, potential erosion and sedimentation impacts to Lighthouse Creek could be reduced to less than significant level.

The development of a project similar to Alternative Design Concept No. 2 would provide the greatest reduction in potential viewshed obstruction and view corridor impacts. The reduction in aesthetic impacts is accomplished by reducing the overall size and height of the structure. Placing a portion of the lower level of the residence below existing grade would reduce the amount of ocean views provided from the residence when compared to the proposed project, however, the alternative design would achieve the project objective of developing a residence on the project site. Similar to the proposed project, a mitigation measure to reduce the height of the structure's eastern elevation to 25 feet would still be required, but the implementation of this mitigation measure would only require a modification to the roof over the carport/garage portion of the residence, and would not result in a reduction in livable square footage. Also similar to the proposed project, mitigation measures to review and approve building colors and landscape materials would also be required. Implementation of the recommended mitigation measures would reduce potential aesthetic impacts to a less than significant level. Therefore, Alternative Design Concept No. 2 would be the environmentally superior project alternative for the reduction of potential aesthetic impacts.

Similar to the proposed project, potential slope stability impacts of Alternative Design Concept No. 2 would be reduced to a less than significant level by providing an adequate storm water collection system on the project site. Grading would be increased under this alternative, but also similar to the proposed project, potential erosion and sedimentation impacts to Lighthouse Creek could be reduced to less than significant level.

**Table 8.4-1  
Proposed Project and Alternatives - Mitigation Requirement Summary**

Mitigation Measure	Proposed Project	“No Project” Alternative	Alt. Design Concept No. 1	Alt. Design Concept No. 2
<b>Aesthetics</b>				
<b>AES 1a.</b> Revised Project Design.				
Reduce eastern elevation to 25 ft.	●		●	●
Reduce western elevation to 15 ft.	●		●	
Eliminate/Reduce use of understory walls	●			
<b>AES 2a.</b> Color Approval	●		●	●
<b>AES 3a.</b> Landscape Plan Approval	●		●	●
<b>Geology</b>				
<b>GEO 1a.</b> Drainage System Requirements	●		●	●
<b>GEO 2a.</b> Foundation Design Approval	●		●	●

**KEY**

- This mitigation measure is required to reduce identified impacts to a less than significant level.

**Table 8.4-2  
Alternatives Impact Comparison Summary**

Threshold	No Project	Alt. 1	Alt. 2
<b>Aesthetics</b>			
A-1. Substantially Degrade an Important Scenic View	Avoided	Similar	Similar
A-2. Substantially Block an Important Public Scenic View Corridor	Avoided	Reduced	Reduced
A-3. Substantially Impair the Visual Context of the Area	Avoided	Similar	Similar
<b>Geology</b>			
B. Exposure to Unstable Earth Conditions	Avoided	Similar	Similar
C. Extensive Grading or Erosion Impacts	Avoided	Increased but not Significant	Increased but not Significant

**KEY**

Avoided = The impacts associated with this threshold would not occur under this alternative. This alternative, however, would not implement any of the objectives of the proposed project.  
Reduced = This alternative’s impacts would be reduced when compared to the impacts of the proposed project and/or the need for project-related design changes would be minimized.  
Similar = This alternative would result in impacts similar to the impacts of the proposed project.  
Increased but No Significant = This alternative would have an increased potential to result in impacts, however, identified impacts can be feasibly reduced to a less than significant level.

## **9.0 REFERENCES and PREPARERS**

### **9.1 REFERENCES**

- Anikouchine, William, 2005, *Geologic Review - 1837½ El Camino De La Luz EIR*.
- Anikouchine, William, 2009, *Geological Inspection Trench at 1837½ El Camino De La Luz*.
- Anikouchine, William, 2011 *Geological Investigation of Slope Stability at 1837½ El Camino De La Luz*.
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- California Coastal Commission, January 16, 2003, *Establishing development setbacks from coastal bluffs*, Mark Johnsson, Staff Geologist.
- California Ocean Protection Council, 2011a, *Resolution of the California Ocean Protection Council on Sea-Level Rise*.
- California State Lands Commission, 2011b, Letter to John Bridley, Waterfront Director.
- California, 2010, *State of California Sea-Level Rise Interim Guidance Document*.
- California, 2009, *California Climate Adaptation Strategy*.
- California, 2008, AB 32 Climate Change Scoping Plan.
- City of Santa Barbara Coastal Plan, July 1994.
- City of Santa Barbara General Plan, August, 1979, *Seismic Safety-Safety Element*.
- City of Santa Barbara, 2010 *Single Family Residence Design Guidelines*.
- City of Santa Barbara, 2005, *Revised Initial Study – ENV2002-00214, 1837½ El Camino De La Luz*.
- interacta, 2004, *Barthels Residence Photo Simulations, 1837½ El Camino De La Luz*.
- Santa Barbara County Air Pollution Control District (*Scope and Content of Air Quality Sections in Environmental Documents, 2010*).

## **9.2 CONTACTS**

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Dan Gullett, City of Santa Barbara Planning Division  
Kathleen Kennedy, City of Santa Barbara Planning Division

## **9.3 EIR PREPARERS**

This Environmental Impact Report was prepared by Rodriguez Consulting, Inc., under contract to the City of Santa Barbara. The evaluation of potential geologic impacts that would have the potential to result from the project design alternatives is based on assessments provided by Mr. William Anikouchine, Ph.D. The alternative project design concepts and photo-simulations were provided by Hochhauser Blatter Architecture and Planning.

## **Appendix A**

**Revised Initial Study ENV2002-00214  
1837½ El Camino de la Luz**

**Notice of Preparation and Responses**





CITY OF SANTA BARBARA  
COMMUNITY DEVELOPMENT DEPARTMENT  
REVISED INITIAL STUDY – ENV2002-00214

On April 6, 2005, the Community Development Department released a Draft Mitigated Negative Declaration evaluating potential impacts associated with the development of a single family residence at 1837 ½ El Camino de la Luz. The Draft Mitigated Negative Declaration was prepared pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended to date.

An environmental hearing to receive comments on the Draft Mitigated Negative Declaration was held before the City Planning Commission on June 16, 2005. At that time, the Planning Commission determined that the preparation of a Focused Environmental Impact Report (EIR) was required to fully evaluate the significance of project impacts on public views to the ocean.

In order to proceed with preparation of a Focused EIR, the Community Development Department has prepared this a revised initial study. The revised August 31, 2005 initial study included revisions to address the public comments received on the Draft Mitigated Negative Declaration. The biological resources section of the August 31, 2005 initial study has been further revised to address comments received in response to the Notice of Preparation. This October 16, 2006 revised initial study would also will be incorporated into the Focused EIR and serve to analyze all issue areas with the exception of aesthetics/visual resources and geologic resources.

CITY OF SANTA BARBARA  
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

INITIAL STUDY/ ENVIRONMENTAL CHECKLIST MST2002-00214

PROJECT: 1837½ El Camino de la Luz

April 4 ~~August 31, 2005~~ October 16, 2006

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant.

**APPLICANT/ PROPERTY OWNER**

Applicant/Owner: Dr. Herb Barthels, 1851 Cliff Drive, Santa Barbara, CA 93109

Agent: Brent Daniels, L&P Consultants, 3 West Carrillo Street, Suite 205, Santa Barbara, CA 93101

**PROJECT ADDRESS/LOCATION (See Exhibit A-Vicinity Map)**

The subject property is located at 1837 ½ El Camino de la Luz, an ocean bluff-top property located approximately 370 feet south of the terminus of the public street, in the West Mesa neighborhood of the City. Lighthouse Creek borders the property to the east and La Mesa Park is located to the northeast. The site is 23,885 square feet (0.55 acres) in size and approximately 95 feet above sea level.

**PROJECT DESCRIPTION (See Exhibit B-Project Plans)**

The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz). The proposed development would require the following discretionary applications:

1. A Coastal Development Permit to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.45.090); and
2. A Modification to allow construction of the new residence on a lot without the required 60-foot frontage on a public street (SBMC §28.15.080).

**ENVIRONMENTAL SETTING**

**Existing Site Characteristics**

Topography: The project site is a bluff-top lot bordered by the Pacific Ocean to the south and Lighthouse Creek to the east. The bluff-top area is characterized by an average slope of approximately 25%. The seacliff portion of the property includes several sections with varying slopes, ranging from approximately 65-94%. The eastern portion of the site includes slopes of approximately 25% to the top of the bank of Lighthouse Creek, which is deeply incised.

Seismic/Geologic Conditions: The project site is subject to low level hazards associated with seismic activity and minimal liquefaction potential. The project site is located in an area of historically active landslides with high potential for erosion.

Biological Resources: The project site is currently vacant. There is evidence of past improvements including an asphalt parking area, and brick planter and concrete drainage swales near the bluff edge. Vegetation is primarily comprised of non-native species typical of disturbed areas. Native plants include California blackberry, poison oak, California sage brush and California fuchsia. Wildlife observed or expected on this site includes those species typical of urbanized areas and the urban fringe. Trees on-site and in the area are used for roosting and nesting by native raptors.

Archaeological Resources: The project site is located in the Prehistoric Sites and Watercourses area of potential archaeological sensitivity as identified on the City's Master Environmental Assessment map. A Phase I archaeological investigation was performed in February 1996 by Larry Wilcoxon. No resources were identified on the site.



### Existing Land Use

**Existing Facilities and Uses:** The project site is currently vacant. Past improvements to the site include an asphalt parking area, concrete drainage swales, and a brick planter. Access to the site is via private easements extending south from the El Camino de la Luz cul-de-sac.

### PROPERTY CHARACTERISTICS

Assessor's Parcel Number:	045-100-065	General Plan Designation:	Residential, 5 units per acre
Zoning:	E-3/SD-3	Parcel Size:	23,885 square feet
Existing Land Use:	Vacant	Proposed Land Use:	Residential
Slope:	25% in upland area to the south and east; 65-94% on bluff faces to the south		
SURROUNDING LAND USES:			
North:	Residential		
South:	Pacific Ocean		
East:	Lighthouse Creek, La Mesa Park, Coast Guard Station		
West:	Residential		

### PLANS AND POLICY DISCUSSION

**Land Use and Zoning Designations:** The project site has a General Plan land use designation of Residential, 5 units per acre. The site is in the E-3 (One-Family Residence) Zone and SD-3 (Coastal Overlay) Zone. The project site conforms to the minimum parcel size requirement of 7,500 square feet per lot, but does not meet the requirement for provision of a minimum of 60 feet of frontage on a public street. The applicant has requested approval of a modification to the frontage requirement. Development of a single family residence as proposed generally conforms to Zoning Ordinance requirements and would be consistent with the site's residential land use designation.

**Local Coastal Plan (LCP) Policies:** The project site is located in the West Mesa neighborhood, which is primarily developed with single family residences. The major coastal issues in this area are hazards of sea cliff retreat and flooding; maintaining and providing access, both vertically and laterally, along the bluffs; protection of archaeological resources; and maintenance of existing coastal views and open space. The following LCP policies are applicable to this project:

*Policy 2.1 – Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

*Policy 2.5 - Vista points shall be provided and maintained in areas where such use by the public has been established.*

*Policy 5.3 - New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

*Policy 6.8 – The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

*Policy 6.10 – The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*

*Policy 8.1 – All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.*

*Policy 8.2 – With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...*

*Policy 9.1 – The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

**General Plan Policies:** The following General Plan policies are applicable to this project:

*Conservation Element: Visual Resources Policy 2.0 – Development on hillsides shall not significantly modify the natural topography and vegetation.*

*Conservation Element: Visual Resources Policy 3.0 – New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.*

*Conservation Element: Visual Resources Policy 6.0 – Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.*

For purposes of CEQA review, the project may be found consistent with applicable policies of the LCP through adherence to the identified project design and mitigation measures, such that potential significant adverse impacts to the City's environmental resources are avoided and minimized to the maximum extent feasible. Potential inconsistencies with policies related to effects on ocean views may result from the project. The Focused EIR will evaluate potential visual resource policy inconsistencies in the assessment of aesthetic impacts. Additionally, a complete analysis of the project's consistency with the LCP and other applicable City policies will be provided in the Planning Commission Staff Report for the project for final consistency determination by decision-makers.

### MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

A draft Mitigation Monitoring and Reporting Program has ~~will~~ been prepared for the project in compliance with Public Resources Code §21081.6. ~~The draft MMRP is attached here as Exhibit C,~~ as part of the Environmental Impact Report.

### ENVIRONMENTAL CHECKLIST

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, NO should be checked. If the project might result in an impact, check YES indicating the potential level of significance as follows:

**Significant:** Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

**Potentially Significant:** Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

**Potentially Significant, Mitigable:** Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

**Less Than Significant:** Impacts that are not substantial or significant.



1. AESTHETICS		NO	YES
Could the project:			<i>Level of Significance</i>
a)	Affect a public scenic vista or designated scenic highway or highway/roadway eligible for designation as a scenic highway?		Potentially Significant, Mitigable
b)	Have a demonstrable negative aesthetic effect in that it is inconsistent with Architectural Board of Review or Historic Landmarks Guidelines or guidelines/criteria adopted as part of the Local Coastal Program?		Less than Significant
c)	Create light or glare?		Less Than Significant

### Visual Aesthetics - Discussion

**Issues:** Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

**Impact Evaluation Guidelines:** Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, and the extent and scenic quality of the views. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, including important views from scenic highways; extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

### Visual Aesthetics – Existing Conditions and Project Impacts

#### 1.a,b) Scenic Views and On-Site Aesthetics

**Existing Conditions:** The project site is located on a bluff-top property. There is existing single family residential development directly to the north and west of the project site. Lighthouse Creek borders the site to the east and La Mesa Park is located to the north and east of the site. La Mesa Park and the foot bridge over Lighthouse Creek (connecting El Camino de la Luz to La Mesa Park) offer public views across the project site to the Pacific Ocean. Views from the park itself include green space in the foreground with a view of the ocean and Santa Cruz Island over the creek canyon, framed by dense tree growth on the east and less dense vegetation screening residences on the west. Views from the eastbound lane of Shoreline Drive include the public parking lot, green space, and an ocean view framed by vegetation. However, bicyclists and motorists experience a fleeting view of the ocean in this area due to vehicle speeds and the approaching curve in the road. Pedestrians have the opportunity to experience a more significant ocean view from this area. Ocean views from the footbridge are more open and residences on the west side of Lighthouse Creek are more plainly visible. Views of the project site from the sandy beach below are of rocky cliff and vegetated bluff. The neighboring residence to the west of the site is partially visible against the skyline from the beach below. Otherwise, bluff top development is not visible from the beach at this section of the coast. The height of the bluffs precludes mountain views from this portion of the beach.

Ocean views from La Mesa Park and the foot bridge are considered a significant visual resource as they afford scenic public views of the ocean and Santa Cruz Island. Much of the existing development in the area is screened by vegetation, which helps to frame the ocean view from the northern portion of the park. This particular view is also the only view corridor from the park to the ocean.

**Project Impacts:** The proposed project would result in the construction of a 1,932 square foot, two-story structure. The proposed residence would intrude into ocean views from Shoreline Drive, La Mesa Park and the Lighthouse Creek foot bridge, as demonstrated by the visual simulations prepared by interacta and dated June 11, 2004 (see Exhibit DC for selected views). The view from the La Mesa Park parking lot, and the lawn area, and benches placed at viewpoints would change from a view of green space, the ocean and Santa Cruz Island, to a view that includes a significant portion of the first floor of the proposed residence (Exhibit DC, MP2). Thus, the project's impact on scenic views from the La Mesa Park lawn area is considered a *potentially significant, mitigable impact*.

The loss of ocean view from Shoreline Drive/Meigs Road would result in an adverse impact to visual resources (Exhibit DC, MP1). A larger portion of the scenic view from this location, not already blocked by vegetation, would be blocked by the development, resulting in a *potentially significant, mitigable impact*. Although the view is fleeting for motorists, bicyclists and pedestrians have the opportunity to stop and view the ocean from this location.

The ocean view from the footbridge over Lighthouse Creek would be diminished the most by development of the site as proposed (Exhibit DC, WB1). Existing residential development on the west side of Lighthouse Creek can be seen from the footbridge and the proposed residence would be highly visible from this location. Although visibility of residential development, in and of itself, is not necessarily an adverse impact, the location of the proposed residence would block a substantial portion of a significant public scenic view, which represents a *potentially significant, mitigable impact*. While installation of vegetation could soften the view of the residence, this portion of the ocean view would be lost indefinitely. Mitigation Measure A-1 requires that the residence be redesigned to minimize intrusion into public views of the ocean as seen from Shoreline Drive and the Lighthouse Creek foot bridge.

The project's impact on scenic views available to the public from La Mesa Park, Meigs Road, and the footbridge over Lighthouse Creek is considered a *potentially significant impact*, and will be further evaluated in a Focused Environmental Impact Report (EIR).

The proposed development would also be visible on the bluff-top as viewed from the sandy beach below (Exhibit DC, B1 and B2). This view is currently comprised of natural bluff faces, but includes some development on the property immediately west of the site. While the proposed residence would be partially visible from the beach below, other development is currently visible from the beach in this area, so it would not result in a significant change to a public view. Thus, the impact to visual resources from the beach is considered *less than significant*.

The scale and design of the proposed development is generally compatible with existing single family residential development in the immediate area. The design concept for the house has been considered by the Architectural Board of Review (ABR) on several occasions. The ABR expressed concerns regarding the visual prominence of the structure and its effect on public views. Final architectural plans would be subject to review and approval by ABR. With the exception of adverse effects on public views, the proposed design would be compatible with and would not adversely affect surrounding land uses or structures.

**Cumulative Impacts:** The proposed project would result in infill development of an existing legal lot adjacent to existing residences. Although site development would adversely affect public views of the ocean, substantial additional development that would further degrade ocean views in the immediate area is not anticipated. Cumulative visual impacts are considered *less than significant*.

#### 1.c) Lighting

Development of the proposed residence would result in additional lighting. Any exterior lighting would be subject to compliance with the requirements of SBMC §22.75, the City's Outdoor Lighting and Design Ordinance, and reviewed by the ABR. The ordinance provides that exterior lighting be shielded and directed to the site such that no undue lighting or glare would affect surrounding residents, roads or habitat areas. Project impacts on lighting and glare would be *less than significant*.

### Visual Aesthetics – Required Mitigation

**A-1 House Design.** Prior to final review and approval by the Architectural Board of Review, the residence shall be redesigned to minimize intrusion into public views of the ocean as seen from La Mesa Park, Shoreline Drive and the Lighthouse Creek foot bridge. The redesign shall consider lowering the profile of the residence by cutting the first floor into the existing grade, reducing the massing of the second story by limiting building height and locating development



further to the west. Landscaping shall be provided to soften views of the residence from public viewing areas while minimizing intrusion into existing ocean views.

Mitigation measures intended to minimize this impact would be identified in a Focused EIR.

### Visual Aesthetics - Residual Impacts

With implementation of Mitigation Measure A-1, project effects on public scenic views would be *less than significant*. Residual impacts would be determined upon further evaluation of the visual effects of the project and the effectiveness of proposed mitigation measures in reducing said impacts. This evaluation will be provided in a Focused EIR.

2. AIR QUALITY		NO	YES
Could the project:			<i>Level of Significance</i>
a)	Violate any air quality standard or contribute to an existing or projected air quality violation?		Less Than Significant
b)	Expose sensitive receptors to pollutants?		Less Than Significant
c)	Create objectionable odors?		Less Than Significant
Is the project consistent with the County of Santa Barbara Air Quality Attainment Plan? Yes			

### Air Quality - Discussion

**Issues.** Air quality issues involve pollutant emissions from vehicle exhaust and industrial or other stationary sources that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NO<sub>x</sub>] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM<sub>10</sub>) include demolition, grading, road dust, and vehicle exhaust, as well as agricultural tilling and mineral quarries.

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards, for six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan. Presently, the County of Santa Barbara is in non-attainment with the CAAQS for ozone (O<sub>3</sub>) and particulate matter (PM<sub>10</sub>). An area is in nonattainment for a pollutant if the applicable CAAQS for that pollutant has been exceeded more than once in three years. There are also heavily congested intersections within the City that may approach the California 1-hour standard of 20 parts per million for carbon monoxide (CO) during peak traffic hours.

**Impact Evaluation Guidelines.** A project may create a significant air quality impact from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly, or sick people to substantial pollutant exposure.
- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

**Long-Term (Operational) Impact Guidelines:** The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO<sub>x</sub>, and 80 pounds per day for PM<sub>10</sub>;
- Emit less than 25 pounds per day of ROC or NO<sub>x</sub> from motor vehicle trips only;
- For CO, contribute less than 800 peak hour trips to an individual intersection;

- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone); and not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

**Short-Term (Construction) Impacts Guidelines:** Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM<sub>10</sub>). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. As a guideline, SBCAPCD Rule 202.F.3 identifies a substantial effect associated with projects having combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide) within a 12-month period.

**Cumulative Impacts and Consistency with Clean Air Plan:** If the project-specific impact exceeds the significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

### Air Quality – Existing Conditions and Project Impacts

#### 2.a-b) Air Pollutant Emissions

**Long-Term (Operational) Emissions:** Emissions associated with the generation of 10 average daily trips and the ongoing use of one new single family residence would not exceed established thresholds for long-term impacts. These impacts are considered *less than significant*.

**Short-Term (Construction) Emissions:** The proposed project would involve grading, paving and landscaping activities which could cause localized fugitive dust and an increase in particulate matter (PM<sub>10</sub>). Dust related impacts are considered *less than significant*. Recommended dust control mitigation measures include sprinkling the site during earth moving activities to control dust, covering of trucks transporting soil/building materials, and stabilization of disturbed areas with seeding and watering, soil binders, etc. Mitigation Measure AQ-6 is also recommended to reduce NO<sub>x</sub> and particulate emissions from construction equipment.

**Sensitive Receptors:** Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality problems. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics. Stationary sources are of particular concern to sensitive receptors, as is construction dust and particulate matter. Nuisance dust and particulates would be reduced to a *less than significant* level through application of dust control mitigation measures. The insignificant amounts of these pollutants would result in an insignificant exposure of sensitive receptors to pollutants.

#### 2.c) Odors

The project is limited to residential use, and would not include land uses involving odors. Smoke emitted from the proposed fireplace would result in a *less than significant impact*; however, to minimize emissions, Mitigation Measure AQ-7 is recommended.

**Consistency with the Clean Air Plan:** Direct and indirect emissions associated with the project are accounted for in the CAP emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies. The project could be found consistent with the Clean Air Plan.

### Air Quality – Recommended Mitigation

**AQ-1 Construction Dust Control - Watering.** During site grading and transportation of fill materials, regular water sprinkling shall occur using reclaimed water whenever the Public Works Director determines that it is reasonably available. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be sufficiently moistened to create a crust.



Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust raised from leaving the site. At a minimum, this will include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph.

**AQ-2 Construction Dust Control – Tarping.** Trucks transporting fill material to and from the site shall be covered from the point of origin.

**AQ-3 Construction Dust Control – Gravel Pads.** Gravel pads shall be installed at all access points to prevent tracking of mud on to public roads.

**AQ-4 Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving or excavation is completed, the entire area of disturbed soil shall be treated to prevent wind pickup of soil. This may be accomplished by:

1. Seeding and watering until grass cover is grown;
2. Spreading soil binders;
3. Sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind;
4. Other methods approved in advance by the Air Pollution Control District.

**AQ-5 Construction Dust Control – Paving.** All roadways, driveways, sidewalks, etc., should be paved as soon as possible. Additionally, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

**AQ-6 Construction Equipment Requirements.** The following shall be adhered to during project grading and construction to reduce NOx and particulate emissions from construction equipment:

1. Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) shall be utilized wherever feasible.
2. Clean diesel fuel (Ultra-Low Sulfur Diesel) fuel shall be used.
3. The engine size of construction equipment shall be the minimum practical size.
4. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
5. Construction equipment shall be maintained in tune per the manufacturer specifications.
6. Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or precombustion chamber engines.
7. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
8. Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.
9. Diesel powered equipment shall be replaced by electric equipment whenever feasible.
10. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.

**AQ-7 Fireplaces.** Wood burning fireplaces and wood stoves shall be prohibited.

#### **Air Quality - Residual Impacts**

Short-term construction related impacts and long-term operational impacts would be *less than significant*. Short-term construction related impacts would be further minimized by recommended mitigation measures for dust control and equipment maintenance.

3. BIOLOGICAL RESOURCES		NO	YES
Could the project result in impacts to:			<i>Level of Significance</i>
a)	Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	✓	
b)	Locally designated historic, Landmark or specimen trees?	✓	
c)	Natural communities (e.g. oak woodland, coastal habitat, etc.).		Potentially Significant, Mitigable
d)	Wetland habitat (e.g. marsh, riparian, and vernal pool)?	✓	Potentially Significant, Mitigable
e)	Wildlife dispersal or migration corridors?	✓	Potentially Significant, Mitigable

#### **Biological Resources - Discussion**

**Issues:** Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

**Impact Evaluation Guidelines:** Existing native wildlife and vegetation on a project site are qualitatively assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

#### **Biological Resources – Existing Conditions and Project Impacts**

##### **3.a,c,d,e) Native Wildlife and Habitat**

A Revised Biological Assessment dated January-February 2006 was prepared for the project applicant by Rachel Tierney (Exhibit ED). On-site vegetation is generally characterized by non-native species in the upland areas and on the upper reaches of the slope down to Lighthouse Creek, and the lower portion of the ocean bluff face. Vegetation on the ocean bluff face includes species typical to coastal bluffs, such as lemonadeberry, salt bush and coast goldenbush. Native vegetation along the slope down to the creek includes California blackberry, poison oak, saltbush, and California fuchsia. The riparian area includes willow woodland. The lowest portion of the creek slope is exposed, steeply sloping Monterey shale.

According to the biological assessment, Lighthouse Creek provides dense, spatially variable, and moderately high quality cover and food resources for a variety of amphibians, reptiles, birds, and small mammals considered to have limited habitat value due to the absence of sediment and the steepness of the rocky creek banks. The creek's steep drop to the beach is considered to preclude steelhead use. Wildlife expected on-site and in the adjacent creek includes urban-associated species or generalist species that can withstand high degrees of habitat disturbance and abundant is limited to species typical of urban settings and appears to support rich bird life. Area residents have noted the presence of a red fox den, coyotes, and frog species along the Lighthouse Creek corridor.

Protocol level surveys for California red-legged frogs (CRLF) were conducted in January and February of 2006. Other special status wildlife species and their habitat were evaluated at this time. CRLF were not observed in the area of Lighthouse Creek surveyed (from the beach to the southern end of La Mesa Park). The upper creek banks adjacent to the project site provide adequate vegetative cover for CRLF, however, pools are not of adequate depth to provide habitat adjacent to the site. The biological assessment did not identify any other endangered, threatened or rare species or



habitats that would be impacted by the proposed project. Lighthouse Creek is not considered to provide an important wildlife corridor due to the steep drop-off above the beach for the reasons state above.

Tierney concludes that the proposed project would not adversely affect wildlife use of the creek due to the distance of the building site from the creek channel and that the steepness of the slopes and creek bank would limit human intrusion into the creek. Long-term impacts to biological resources are considered *less than significant*.

The project site is located approximately 600 feet from La Mesa monarch butterfly roost. The project would not impact this roost due to the distance from the roost and because no removal of roost or adjacent vegetation is proposed.

The proposed drainage design involves collection of site runoff in two catch basins, where it would be conveyed via underground pipes, to Lighthouse Creek. Drain pipes would be located across the steep slope down to the creek in two locations, converging above the creek bed. A rip rapped dissipater would be constructed in the creek bed at the terminus of the drainage pipe. Construction of these facilities would result in disturbance and vegetation removal on the hillside and within the creek bed. Work within the creek would require a Streambed Alteration Agreement from the California Department of Fish and Game. Impacts to native vegetation and creek habitat associated with installation of the drainage system are considered *potentially significant, mitigable*. Mitigation Measures BIO-1 through BIO-45 are required to reduce the biological impacts associated with construction activities and vegetation removal and installation to a *less than significant level*.

Project construction could result in the introduction of sediment and pollutants such as oil, paint or concrete into the creek or down the bluff face. The incorporation of erosion control measures and designation of concrete washing locations to preclude runoff into the creek would ensure that impacts remain *less than significant*.

### 3.b) Specimen Trees

The project would have *no impact* on any locally designated historic, Landmark or specimen trees because none are located in the project construction area.

### Biological Resources – Required Mitigation

**BIO-1 Habitat Restoration.** Areas between the proposed building site and Lighthouse creek on the creek slope, bank and channel-disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods. Vegetation removal shall be by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include western sycamore, coast live oaks, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of bare slopes to prevent short-term erosion. The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff and the Architectural Board of Review for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

**BIO-2 Appropriate Plants/Hardscape on Bluff.** Special attention shall be paid to the appropriateness of the existing and proposed plant material, and to the sloped areas. All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed in a manner that does not disturb the root system and replaced with appropriate plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's report, dated December 12, 2002/January-February 2006, and include: 1) Addition of native trees and shrubs along the mid-point of the slope to improve habitat value; 2) Removal of iceplant, oleander, yucca, castor bean, English and German ivy; 3) Replacement with natives such as western sycamore, coast live oaks, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry; and 4) Use of erosion control blankets and seeding on bare slopes to prevent short-term erosion. The landscape plan shall be provided to the Community Development Department Staff and the Architectural Board of Review for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

**BIO-3 Irrigation System.** The irrigation system shall be designed and maintained with the most current technology to prevent a system failure, and watering of vegetation on the bluff edge shall be kept to the minimum necessary for plant survival. The drip system along the bluff edge shall be removed after two full seasons of plant growth.

**BIO-4 Erosion Control/Water Quality Plan.** An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City and Regional Water Quality Control Board, and shall include, at a minimum, the following:

1. Minimize the area of bare soil exposed at one time (phased grading).
2. Install silt fence, sand bag, hay bale or silt devices where necessary around the project site to prevent offsite transport of sediment.
3. Bare soils shall be protected from erosion by applying heavy seeding, within five days of clearing or inactivity in construction.
4. Construction entrances should be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
5. During construction of the homes, the contractor and/or property owner shall protect the storm drain inlets from sediment-laden runoff.
6. Erosion control materials (i.e. sandbags, strawbales, and silt fencing) shall be used to trap and filter sediment before entering the storm drain.
7. Establish fuel and vehicle maintenance staging areas located away from all drainage courses, and design these areas to control runoff.
8. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents should not be discharged into sanitary or storm sewer systems. Washout from concrete trucks should be disposed of at a location not subject to runoff and more than 50 feet away from a storm drain, open ditch or surface water.

**BIO-5 Streambed Alteration Agreement.** The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Game, prior to approval-submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.

### Biological Resources - Residual Impacts

Potentially significant impacts to biological resources would be reduced to a *less than significant level* with the incorporation of the identified mitigation measures.

4. CULTURAL RESOURCES		NO	YES Level of Significance
Could the project:			
a)	Disturb archaeological resources?		Less Than Significant
b)	Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?	✓	
c)	Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?	✓	

### Cultural Resources - Discussion

**Issues:** Archaeological resources are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City. Spanish explorers and eventual settlements in Santa Barbara occurred in the 1500's through 1700's. In the mid-1800's, the City began its transition from Mexican village to American city, and in the late 1800's through early 1900's experienced intensive urbanization. Historic resources are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance.



The City's built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara's downtown following a destructive 1925 earthquake.

**Impact Evaluation Guidelines:** Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

#### **Cultural Resources – Existing Conditions and Project Impacts**

##### **4.a) Archaeological Resources**

The project site is located in the Prehistoric Sites and Watercourses area of potential archaeological sensitivity as identified on the City's Master Environmental Assessment map. A Phase I archaeological investigation was performed in February 1996 by Larry Wilcoxon to determine whether cultural resources were present on site. The survey did not locate any cultural resources and thus, impacts are considered *less than significant*. However, in the unlikely event that cultural resources are found during site preparation or construction, a recommended mitigation measure has been included for resources evaluation and impact mitigation per the Master Environmental Assessment.

##### **4.b) Historic Resources**

There are no historic resources on the project site. Development of a single family residence would have *no impact* on any historic resources in the project vicinity.

##### **4.c) Ethnic/Religious Resources**

There is no evidence that the site involves any ethnic or religious use or importance. The project would have *no impact* on historic, ethnic or religious resources.

#### **Cultural Resources – Mitigation**

**CR-1 Discovery Procedures and Mitigation.** Standard discovery measures shall be implemented per the City Master Environmental Assessment throughout grading and construction:

Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts.

If during any grading or construction on the site such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and a City-approved archaeologist shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, including but not limited to redirection of grading and/or excavation activities. If the findings are potentially significant, further analysis and/or other mitigation shall be prepared and accepted by the Environmental Analyst and the Historic Landmarks Commission, and implemented by the project. Work in the area may only proceed after the Environmental Analyst grants authorization.

If prehistoric or other Native American remains are encountered, a Native American representative shall be consulted, and the archaeologist and Native American representative shall monitor all further subsurface disturbances in the area of the find.

If the discovery consists of potentially human remains, the Santa Barbara County Coroner and the California Native American Heritage Commission must also be contacted.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to the issuance of final City permits.

#### **Residual Impacts:**

Impacts to cultural resources would be *less than significant*.

5. GEOPHYSICAL CONDITIONS		NO	YES
Could the project result in or expose people to:			<i>Level of Significance</i>
a)	Seismicity: fault rupture?	✓	
b)	Seismicity: ground shaking or liquefaction?		Less Than Significant
c)	Seismicity: seiche or tsunami?	✓	
d)	Landslides or mudslides?		Potentially Significant, Mitigable
e)	Subsidence of the land?		Potentially Significant, Mitigable
f)	Expansive soils?		Potentially Significant, Mitigable
g)	Excessive grading or permanent changes in the topography?	✓	

#### **Geophysical Conditions - Discussion**

**Issues:** Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a condition in which saturated soil loses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

**Impact Evaluation Guidelines:** Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

#### **Geophysical Conditions – Existing Conditions and Project Impacts**

##### **5.a-c) Seismic and Ground Shaking/Liquefaction Hazards**

The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefaction) and the site is well above the tsunami run-up area. Therefore, there would be no impacts from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a *less than significant impact*.

##### **5.d-f) Geologic or Soil Instability**

###### **Landslides:**

The project site is located on a coastal bluff in an area characterized by landslides in the recent past. The peer review of prior geological studies of the site by Dr. William Anikouchine (Exhibit FE), included an analysis of the potential for landslides on the project site. The report concludes that the project site is stable in the short term and that there could be stability problems on the site in the long term. The City requires that geological information be provided to verify that the portion of the site including any primary structures would not erode in a 75-year period. Dr. Anikouchine also verified



the accuracy of the top of bluff identified on the plans, determined by Fisher Geologic in December 2001. The top of bluff was determined based on the California Coastal Commission's definition of "bluff edge." This definition states that, "when the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the edge shall be defined as that point nearest the cliff beyond which the downward gradient of the land surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step-like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge."

The peer review indicates that the project development would not be susceptible to slope failure during the life of the structure, provided that surface runoff is captured and conveyed away from the bluff face and use of irrigation in this area is minimized. The proposed project could result in increased runoff being directed onto the bluff face and this could cause slope failure, a *potentially significant, mitigable* impact. A mitigation measure to minimize the amount of water in the underlying soils would reduce the impact of landslides to a *less than significant level*.

#### Subsidence:

The Buena Engineers (1971) report found that the project site is subject to some settlement based on laboratory testing of soils from the site. The report indicates that the subsidence can be adequately addressed using a properly engineered foundation design. The potentially significant impact can be reduced to a *less than significant level* using an appropriate foundation design, included in Mitigation Measure G-2.

#### Expansive Soils:

According to Smith (1980) soils at the site are expansive and can be addressed by use of a caisson foundation rather than footings. Expansive soils could cause a *potentially significant, mitigable impact*. This impact can be reduced to a *less than significant level* by having the structural foundation designed by an engineering geologist.

#### 5.g) Topography; Grading/ Erosion

As proposed, the topography of the site would be slightly modified to direct the runoff from the driveway and garage back-out area to a catch basin. Project grading is proposed to be balanced on site and construction of the residence is expected to generate a minimal amount of cut and/or fill and re-compaction of soil, resulting in a *less than significant impact*.

#### Geophysical Conditions – Required Mitigation

**G-1** All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to the ravine east of the parcel or the beach. Landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

**G-2** The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

#### Geophysical Conditions – Residual Impacts

Potentially significant impacts to geophysical conditions would be reduced to a *less than significant level* with the incorporation of the identified mitigation measures.

6. HAZARDS		NO	YES
Could the project involve:			Level of Significance
a)	A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Less than Significant
b)	The creation of any health hazard or potential health hazards?	✓	
c)	Exposure of people to existing sources of potential health hazards?	✓	
d)	Increased fire hazard in areas with flammable brush, grass, or trees?		Potentially Significant, Mitigable

#### Hazards - Discussion

**Issues:** Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

**Impact Evaluation Guidelines:** Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

#### Hazards – Existing Conditions and Project Impacts

##### 6.a,b,c) Public Health and Safety

The project site has no known contamination and is not listed on the County Fire Department Hazardous Materials parcel listings. The project site is not located close to sources of public safety or health hazards, such as pipelines. Hazardous materials use and storage would be limited to small amounts of common household, automotive, and gardening supplies, such as cleansers, paint, motor oil, and pesticides. *Less than significant impacts* due to the use of oils, paint, and cleaners during construction activities would be present during development of a single family residence on this property. Mitigation required in the Biological Resources section of this study would further reduce this impact.

##### 6.d) Fire Hazard

The project site is located outside of the High Fire Hazard area but is located upslope from a brush covered creek channel. The development of a single family residence would not increase fire hazards in the area; however, emergency access to the site does not meet Fire Department standards. Four existing residences are accessed from the existing private driveway proposed to access the new residence at 1837½ El Camino de la Luz. Three of these residences would receive emergency access from the private driveway and conform to current fire protection standards. A fire hydrant is located within 500 feet of the rear of the proposed residence.

The vehicle access easements to the subject site from the cul-de-sac of El Camino de la Luz vary in width from 10 to 15 feet over a distance of approximately 370 feet. Fire Department standards require provision of a 20 foot wide access to within 150 feet of the furthest exterior wall of any building when that access serves four or more residences. As proposed, the development would not meet these requirements. The inability to achieve standards for the provision of emergency fire services is considered a *potentially significant impact*. Substandard access width can be compensated by installing fire sprinklers if the closest fire engine can gain adequate access to within 250 feet of the exterior of all structures. The Fire Department has stated that the northernmost portion of the existing driveway, which provides a 15-foot wide access to within 250 feet of the furthest exterior wall of the proposed building, would serve as adequate access to the subject site if the mitigation measures identified below were implemented. These measures would reduce the impact to a *less than significant level* (see the Transportation/Circulation section of this study for more information about vehicle access).

#### Hazards – Required Mitigation

- H-1 Automatic Fire Sprinklers.** New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.
- H-2 Monitored Fire Alarm System.** A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.
- H-3 Compliance with High Fire Construction Requirements.** The new residence shall be build in accordance with the City's High Fire Construction requirements.
- H-4 Fire Protection System Maintenance.** The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.



### Hazards – Residual Impacts

Potentially significant, mitigable impacts associated with fire hazards due to substandard access for emergency vehicles can be reduced to a *less than significant* level with the provision automatic fire sprinklers, a monitored fire alarm system, compliance with high fire construction requirements, and appropriate maintenance of fire protection systems.

7. NOISE	NO	YES
Could the project result in:		<i>Level of Significance</i>
a) Increases in existing noise levels?		Less than Significant
b) Exposure of people to severe noise levels?	✓	

### Noise - Discussion

**Issues:** Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) *Noise Contour Map* identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level ( $L_{dn}$ ) or Community Noise Equivalence Level (CNEL) measurement scales. The  $L_{dn}$  averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since  $L_{dn}$  is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to  $L_{dn}$  but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and  $L_{dn}$  values usually agree with one another within 1 dB(A). The Equivalent Noise Level ( $L_{eq}$ ) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise.  $L_{eq}$  values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

**Impact Evaluation Guidelines:** A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of Noise Element land use compatibility guidelines as follows:
  - **Residential:** Normally acceptable maximum exterior ambient noise level of 60 dB(A); maximum interior noise level of 45 dB(A).
- Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.

### Noise – Existing Conditions and Project Impacts

#### **7.a,b) Increased Noise Level; Exposure to High Noise Levels**

**Long-Term Operational Noise:** The City's Master Environmental Assessment maps indicate the property is located in an area where noise levels are 60 dBA or less. The Noise Element establishes 60 dBA as the acceptable exterior noise level for residential uses. No substantial noise generation is anticipated to occur as a result of the proposed residential use. Therefore, the project site would not be subject to high noise levels, nor would the project cause high operational noise levels.

**Temporary Construction Noise:** Noise during construction is generally intermittent and sporadic, and after completion of initial grading and site clearing activities, tends to be quieter. Noise generated during project grading activities would result in a short-term adverse construction impact to residential receptors in the area. Construction of the residence is anticipated to result in use of heavy equipment. Construction noise is limited by City ordinance to the hours between 7:00 a.m. and 8:00 p.m. daily for noise generating activities that would increase noise levels at the nearest residential property line by 5 decibels. The project is limited in scope and the potential impact due to construction noise would be *less than significant*. However, the level of potential adverse effect would be further reduced through recommended measures below, including careful construction scheduling, further limiting construction activities to daytime hours on weekdays, and use of equipment mufflers.

#### Noise - Mitigation

**N-1 Construction Notice.** At least 20 days prior to commencement of construction, the contractor shall provide written notice to all property owners and residents within 450 feet of the project area. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) who can answer questions, and provide additional information or address problems that may arise during construction. A 24-hour construction hot line shall be provided. Informational signs with the PEC's name and telephone number shall also be posted at the site.

**N-2 Construction Hours.** Noise-generating construction activities (which may include preparation for construction work) shall be permitted weekdays between the hours of 8:00 a.m. and 5:00 p.m., excluding holidays observed by the City as legal holidays: New Year's Day (January 1<sup>st</sup>); Martin Luther King Jr.'s Birthday (3<sup>rd</sup> Monday in January); President's Day (3<sup>rd</sup> Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4<sup>th</sup>); Labor Day (1<sup>st</sup> Monday in September); Thanksgiving Day (4<sup>th</sup> Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25<sup>th</sup>). \*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be observed as a legal holiday.

Occasional night work may be approved for the hours between 5 p.m. and 8 a.m. by the Chief of Building and Zoning (per Section 9.16.015 of the Municipal Code) between the hours of 5 p.m. and 8 a.m. weekdays. In the event of such night work approval, the applicant shall provide written notice to all property owners and residents within 450 feet of the project property boundary and the City Planning and Building Divisions at least 48 hours prior to commencement of any. Night work shall not be permitted on weekends and holidays.

**N-3 Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

#### Noise – Residual Impact

Impacts associated with long and short term noise sources are considered *less than significant*. Recommended mitigation measures would minimize the nuisance associated with construction noise.

8. POPULATION AND HOUSING	NO	YES
Could the project:		<i>Level of Significance</i>
a) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?		Less Than Significant
b) Displace existing housing, especially affordable housing?	✓	



## Population and Housing - Discussion

**Impact Evaluation Guidelines:** Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

## Population and Housing – Existing Conditions and Project Impacts

### **8.a) Growth-Inducing Impacts**

The project would not involve a substantial increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. The project would not involve substantial employment growth that would increase population and housing demand. Growth-inducing impacts would be *less than significant*.

### **8.b) Housing Displacement**

The project would not involve any housing displacement. *No impact* would result from the project.

## Population and Housing - Mitigation

No mitigation is required.

## Population and Housing – Residual Impact

Project effects on population and housing would be *less than significant*.

9. PUBLIC SERVICES	NO	YES
Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:		<i>Level of Significance</i>
a) Fire protection?		Less than Significant
b) Police protection?		Less than Significant
c) Schools?		Less than Significant
d) Maintenance of public facilities, including roads?		Less than Significant
e) Other governmental services?		Less than Significant
f) Electrical power or natural gas?		Less than Significant
g) Water treatment or distribution facilities?		Less than Significant
h) Sewer or septic tanks?		Less than Significant
i) Water distribution/demand?		Less than Significant
j) Solid waste disposal?		Less than Significant

## Public Services - Discussion

**Issues:** This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

**Impact Evaluation Guidelines:** The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.

- Substantial increase in solid waste disposal to area sanitary landfills.

## Public Services – Existing Conditions and Project Impacts

### **9.a,b) Fire and Police Protection**

The property is served by City Fire and Police Departments. Project development would result in construction and habitation of a residence that would not generate a substantial demand for increased police services, but is in a location that does not have adequate access for emergency services. In order to compensate for inadequacies in emergency services access, the installation of a monitored fire alarm system would be required. The increased service demand associated with monitoring the alarm system for this project alone is considered *less than significant*.

### **9.c) Schools**

The project site is served by the Santa Barbara Elementary and High School Districts. The project would provide a net increase of one residential unit, which could generate additional students. None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. School impact fees would be applied to the project in accordance with State law. Project impacts to schools would be *less than significant*.

### **9.d,e,f) Public Facilities/Roads/Governmental Service/ Utilities**

The proposed project would not significantly impact public facilities, roads, government services or utilities as these services are adequate to accommodate an additional single family residence. Project impacts would be *less than significant*.

### **9.g,h,i) Water and Sewer**

#### Water

The City of Santa Barbara's water supply comes from the following sources, with the actual share of each determined by availability and level of customer demand: Cachuma Reservoir and Tecolote Tunnel, Gibraltar Reservoir and Mission Tunnel, 300 Acre Feet per Year (AFY) of contractual transfer from Montecito Water District, groundwater, State Water Project entitlement, desalination, and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by displacing demand that would otherwise have to be supplied by additional sources. In 1994, based on the comprehensive review of the City's water supply in the Long Term Water Supply Alternatives Analysis (LTWSAA), the City Council approved the Long Term Water Supply Program (LTWSP). The LTWSP outlines a strategy to use the above sources to meet the projected demand of 17,900 AFY (including 1,500 AFY of demand projected to be met with conservation) plus a 10 percent safety margin for a total of 19,700 AFY. Therefore, the target for the amount of water the system will actually have to supply, including the safety margin, is 18,200 AFY. The 2003 Water Supply Management Report documents an actual system demand of 13,460 AFY and a theoretical commitment of 16,170 AFY. Of the total system production, 95% was potable water and 5% was reclaimed water.

The existing development on the site receives water service from the City of Santa Barbara water supply, treatment, and distribution system. The proposed project is estimated to demand 0.74 AFY of potable water. The City's long-term water supply and existing water treatment and distribution facilities with proposed facility hook-ups for the new structures and landscaping would adequately serve the project. The potential increase in demand would constitute a *less than significant* impact to the City water supply.

#### Sewer

The project site is currently served by City sewer system. The project would include one new residence, which is estimated to demand 571 gallons/day or 0.64 AFY (87% of water demand). The maximum capacity of the El Estero Treatment Plant is 11 million gallons per day, with average daily flow millions of gallons per day less than the capacity. Increased sewage treatment associated by the project can be accommodated by the existing City sewer system and sewage treatment plant, and would represent a *less than significant* impact.

### **9.j) Solid Waste Generation/ Disposal**

Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period.



The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]). Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable.

Proposed projects with a project specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

**Long-Term (Operational).** The proposed project use is estimated to generate 2.38 TPY of solid waste (2.51 persons/household<sup>1</sup> x 1 unit x 0.95 TPY), which is a *less than significant impact*. With application of source reduction, reuse, and recycling, landfill disposal of solid waste could be reduced to 1.2 TPY.

**Short-Term (Demolition and Construction).** Project grading is proposed to be balanced on site. Construction-related waste generation would be short-term and *less than significant*. Application of recommended standard mitigation to reduce, reuse, and recycle construction waste to the extent feasible would minimize this effect.

#### Public Services - Mitigation

**PS-1 Construction Materials Recycling.** Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the site.

#### Public Services - Residual Impacts

Project effects on public services would be *less than significant*. A recommended mitigation measure would further reduce less than significant impacts associated with solid waste generation during construction.

10. RECREATION	NO	YES
Could the project:		<i>Level of Significance</i>
a) Increase the demand for neighborhood or regional parks or other recreational facilities?		Less Than Significant
b) Affect existing parks or other public recreational facilities?		Less Than Significant

#### Recreation - Discussion

**Issues:** Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

**Impact Evaluation Guidelines:** Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

#### Recreation - Existing Conditions and Project Impacts

##### 10.a) Recreational Demand

The development of one additional single family residence would not significantly affect demand for recreational facilities. Impacts are *less than significant*.

##### 10.b) Existing Recreational Facilities

The project, as proposed, could significantly impact existing public views of the ocean from La Mesa Park. These adverse visual effects would diminish the public's recreational experience from the park; however, these facilities would

<sup>1</sup> Based on data obtained from the U.S. Census Bureau (Census 2000), the average household size of owner-occupied units in the City of Santa Barbara is 2.51 persons per household.

still remain available for public use and this impact is considered to be *less than significant*. Please refer to the Visual Aesthetics section of this document for further discussion of this issue.

#### Recreation - Mitigation

Please refer to the Visual Aesthetics section for proposed mitigation measures to reduce visual impacts from public viewing areas.

#### Recreation - Residual Impacts

Implementation of proposed mitigation measures requiring a redesign of the house to minimize intrusion into public views from La Mesa Park would further reduce this *less than significant impact*.

11. TRANSPORTATION/CIRCULATION	NO	YES
Could the project result in:		<i>Level of Significance</i>
a) Increased vehicle trips?		Less Than Significant
b) Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?	✓	
c) Inadequate emergency access or access to nearby uses?		Potentially Significant, Mitigable
d) Insufficient parking capacity on-site or off-site?	✓	
e) Hazards or barriers for pedestrians or bicyclists?	✓	

#### Transportation - Discussion

**Issues:** Transportation issues include traffic, access, circulation, safety, and parking. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation, traffic, and parking in the City.

**Impact Evaluation Guidelines:** A proposed project may have a significant impact on traffic/ circulation/ parking if it would:

##### Vehicle Traffic

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in transit system.
- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

##### Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian and/or bicycle circulation.
- Result in inadequate emergency access on-site or to nearby uses.

##### Parking

- Result in insufficient parking capacity for the projected amount of automobiles and bicycles.

**Traffic Thresholds of Significance:** The City uses Levels of Service (LOS) "A" through "F" to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).



For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered "impacted" if the volume to capacity ratio is .77 V/C or greater.

**Project-Specific Significant Impact:** A project-specific significant impact results when:

- (a) Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or
- (b) The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.

**Significant Cumulative Contribution:** A project would result in a significant contribution to cumulative traffic impacts when:

- (a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or
- (b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

#### **Transportation – Existing Conditions and Project Impacts**

##### **11.a) Traffic**

###### **Long-Term Traffic**

The project site is located in the West Mesa neighborhood and is accessed from local roads, El Camino de la Luz and Oliver Road. Cliff Drive, located to the north of the site, is the closest arterial and provides access to Meigs Road/Carrillo Boulevard to the east and Las Positas Road to the west. With the exception of the Cliff Drive/Las Positas Road intersection, which operates at LOS F, all the nearby intersections operate at LOS A or B. The project is expected to generate approximately one p.m. peak hour trip and ten average daily trips. When these trips are added to the existing street network they would not result in significant traffic impacts.

###### **Short-Term Construction Traffic**

Based on the limited scope of the project, potential temporary construction related traffic impacts would be *less than significant*. Standard mitigation measures are recommended to minimize adverse impacts to the neighborhood. These include restrictions on the hours permitted for construction trips and approval of routes for construction traffic.

##### **11.c) Access**

The subject parcel was part of a 2-lot subdivision approved by the City in 1958. The conditions of that approval have created much confusion over the years, the most significant of which is the width of the vehicle access easement serving the property.

On May 29, 1958, the City Council approved a request for a two-lot subdivision of the property at 1837 El Camino de la Luz, resulting in the creation of the subject property and the lot directly to the north. The minutes of that Council meeting (Exhibit GF) state that the subdivision was approved as submitted by the applicant. It is not clear, based on City records, what plan was submitted by the applicant and approved by the Council. The minutes of the City Council meeting and two previous Planning Commission hearings consistently refer to a proposed 15-foot easement serving the subject property. Yet, the plan attached as Exhibit HQ of this study represents our best understanding of what was approved, given that a Planning Commission receipt date stamp is on it, as well as a City Council approval stamp, although this stamp is not signed and dated. This plan indicates that the existing parcel (Parcel 1) was served by a 15-foot wide private easement from the end of El Camino de la Luz and the proposed parcel (Parcel 2) would be served by a 10-foot wide easement for vehicular access purposes.

In 1958, the City required the recordation of a written instrument within one year of approval to validate a lot split. This never occurred in this case. In 1963, a Grant Deed conveyed the subject parcel from Gertrude E. Eaton to Ed. R. and Joanne F. Brewer, which was illegal since the second parcel created by the lot split was never validated. Per an allowance by the Subdivision Map Act, the City issued a Conditional Certificate of Compliance (CCC) for the subject parcel, which was recorded in December 1999. The CCC allows for the property to be legally sold, leased, or financed, pursuant to the Subdivision Map Act; however, development proposed of the real property must meet the following condition of the CCC (Gov't Code §66410):

*"Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the original lot split."*

The outstanding question is "the required amount of legal access that formed the basis of the original lot split." Based on the City Attorney's review of applicable materials, the required access to the subject parcel is not clearly and definitely established from a legal standpoint. Thus, any development of the subject parcel without adequate legal access to satisfy the requirement of the CCC is a *potentially significant impact*. The condition of the CCC, included as Mitigation Measure T-1, must be satisfied in order to reduce this impact to a *less than significant level*.

Adequate access must also be provided to the project site for construction equipment necessary to build the residence. Given that the owner must provide evidence of adequate access to the site for general circulation purposes, per required Mitigation Measure T-1, it is assumed that access would also be found adequate to allow for construction equipment to traverse the private easements to access the subject property, resulting in a *less than significant impact* in that regard.

##### **11.b,d,e) Circulation/Parking/Safety**

No sharp curves, inadequate sight distance or dangerous intersections are present in this area. Parking for the proposed residence would be accommodated in a proposed two-car garage on-site. *No significant impacts* to the street network or parking supply would occur.

#### **Transportation – Required Mitigation**

**T-1 Evidence of Adequate Access.** Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.

#### **Transportation – Recommended Mitigation**

**T-2 Construction Traffic.** The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.

**T-3 Construction Parking.** Construction parking and vehicle/equipment/materials storage shall be provided as follows:

1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.
2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.

#### **Transportation – Residual Impact**

Residual circulation impacts would be *less than significant*.

12. WATER ENVIRONMENT		NO	YES
Could the project result in:			Level of Significance
a)	Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		Potentially Significant, Mitigable
b)	Exposure of people or property to water related hazards such as flooding?	✓	
c)	Discharge into surface waters?		Less Than Significant
d)	Change in the quantity, quality, direction or rate of flow of ground waters?		Less Than Significant
e)	Increased storm water drainage?		Less Than Significant

#### **Water – Discussion**

**Issues:** Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.



**Impact Evaluation Guidelines:** A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.

Flooding

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard

Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

**Water Resources – Existing Conditions and Project Impacts**

**12.a,d,e) Drainage**

The majority of the upland portion of the site is currently covered by asphalt. The project site currently drains by sheet flow across the asphalt area, to the south over the ocean bluff face and to the east into Lighthouse Creek. Off-site drainage from the property to the west is conveyed in a concrete drainage swale across a portion of the subject site to the top of the ocean bluff. Off-site drainage from the private road area to the north flows across the site to the ocean bluff.

Development of the project would result in a negligible difference in impervious surface coverage, so the change in quantity of water is considered *less than significant*. The proposed drainage design would collect some flows from off-site to the north, and from the proposed residence and paved areas. This drainage would be filtered in catch basins and conveyed by underground pipes to Lighthouse Creek. This would result in a change to the direction and flow of runoff water, but would be considered an improvement to current conditions since the site is located on a sensitive bluff-top. While the changes to existing drainage patterns would be substantial, they are considered a *less than significant* environmental effect because the proposed drainage system would adequately control runoff water and reduce erosion of the sea cliff. A rip rap dissipater would be constructed in the creek channel to minimize erosion. This conceptual drainage design has been reviewed by the Building & Safety Division and generally meets City standards. Development of a final engineered design would be required prior to issuance of building permits. Mitigation Measure W-2 is recommended to ensure that the proposed drainage system continues to be maintained and functional.

**12.b) Flooding**

According to the FEMA Federal Flood Insurance Program Flood Insurance Rate Map for the City of Santa Barbara, the project site is not located within the 100-year floodplain or an area otherwise subject to flooding. Flooding impacts are considered *less than significant*.

**12.c,d) Water Quality**

Long-Term (Operational) Impacts. Site drainage would be collected, filtered and conveyed to Lighthouse Creek. The use of an appropriate filtration system coupled with a maintenance program would provide treatment of drainage waters before they reach the creek or ocean. Therefore, with adequate maintenance of the filtration system, impacts from discharge into surface waters would be *less than significant*.

Short-Term (Construction) Impacts. Grading activities and construction of the residence would result in a *potentially significant, mitigable impact* to water quality. With the implementation of an Erosion Control/Water Quality Plan (Mitigation Measure BIO-4), the potential for short-term water quality impacts due to erosion and sedimentation during grading and construction would be reduced to a *less than significant level*.

**Water Resources – Required Mitigation**

**W-1 Drainage and Water Quality.** Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by City Building Division and Public Works Department per City regulations. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project.

See also Bio-4 for additional mitigation measures.

**Water Resources – Recommended Mitigation**

**W-2 Drainage System Maintenance.** The Owner shall maintain the drainage system consistent with an approved maintenance plan. The maintenance plan shall include periodic clean-out of inlets and filters and filter replacement as necessary. This plan shall be provided with the building plan submittal for review and approval by Community Development prior to approval of building permits.

**Water Resources – Residual Impact**

Implementation of the identified mitigation measures would reduce water resource impacts to a *less than significant level*.

MANDATORY FINDINGS OF SIGNIFICANCE.		YES	NO
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		✓
c)	Does the project have potential impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		✓

**INITIAL STUDY CONCLUSION**

On the basis of this initial evaluation, it has been determined that the proposed project MAY have a significant effect on the environment in terms of aesthetic resources, and further study in an ENVIRONMENTAL IMPACT REPORT is required for this single-issue area. With identified mitigation measures agreed-to by the applicant, potentially significant impacts in all other issue areas would be avoided or reduced to less than significant levels. A Mitigated Negative Declaration will be prepared.

Initial Study Preparer: Renee Brooke, AICP, Project Planner Revised 10/16/06 by Victoria Greene, Project Planner

DA Andalerio  
Environmental Analyst

October 18, 2006  
Date

**EXHIBITS:**

A. Vicinity Map

B. Project Plans

C. Mitigation Monitoring and Reporting Program

D.C. Visual Simulations prepared by interacta, dated June 11, 2004

E.D. Biological Assessment prepared by Rachel Tierney, dated December 12, 2002

F.E. Peer Review of Geologic Analysis prepared by Dr. William Anikouchine, dated March 16, 2005

G.F. City Council Minutes dated May 29, 1958

H.G. Plan showing Proposed Division of the Property of Fred D. Eaton

#### LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

“Biological Assessment,” prepared by Rachel Tierney (December 12, 2002 and revised January-February 2006)

California Environmental Quality Act (CEQA) & CEQA Guidelines

“Engineering Geologic Update Report,” prepared by Fisher Geologic (December 1, 2001)

General Plan Circulation Element

General Plan Conservation Element

1995 Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Local Coastal Plan (*Main or Airport*)

Master Environmental Assessment

Parking Design Standards

“Peer Review of Geologic Analysis for a Project at 1837 1/2 El Camino de la Luz,” prepared by Dr. William Anikouchine (March 16, 2005)

“Phase I Archaeological Investigation,” prepared by Larry Wilcoxon (February 1996)

Santa Barbara Municipal Code & City Charter

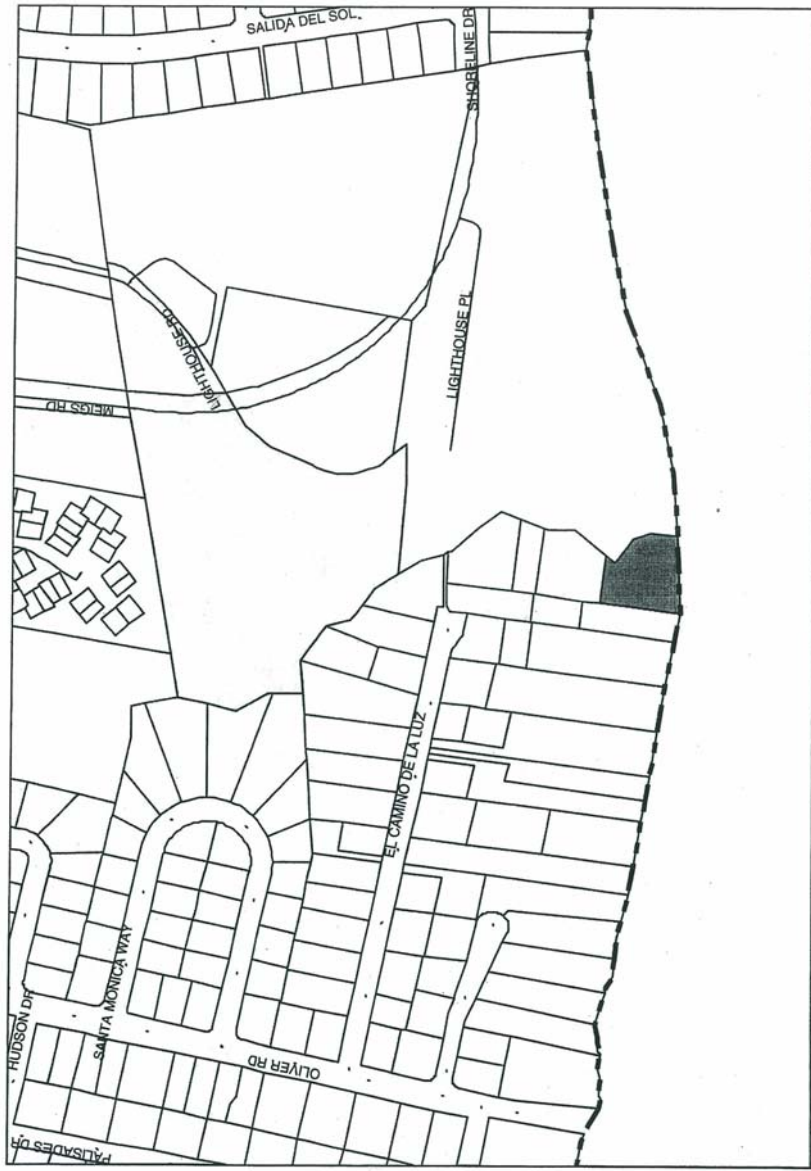
Special District Map

Uniform Building Code as adopted by City

Visual Simulations, prepared by interacta, dated June 11, 2004

Zoning Ordinance & Zoning Map

F:\USERS\PLAN\Environ. Review\Initial Studies\1837.5 El Camino de la Luz Revised Initial Study 10.16.06.doc









## Barthels Residence

Photo Simulation  
1837 1/2 El Camino De La Luz

RECEIVED

AUG 10 2004

CITY OF SANTA BARBARA  
THE ASSOCIATE

L&P Consultants

interacta  
171 June 2004

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Barthels  
Residence

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Location Map - Camera Locations

**Camera Locations:**

**Mesa Park Views**

- MP1 - Entrance to Parking Lot
- MP2 - Lawn
- MP3 - Bench

**Walking Bridge Views**

- WB1 - Bridge 1
- WB2 - Bridge 2

**Beach Views**

- B1 - Beach 1
- B2 - Beach 2
- B3 - Beach 3



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Location Map - Camera View Corridors

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- MP1 - Entrance to Parking Lot
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- WB2 - Bridge 2

**Beach Views**

- B1 - Beach 1
- B2 - Beach 2
- B3 - Beach 3



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MP1 - Entrance to Parking Lot

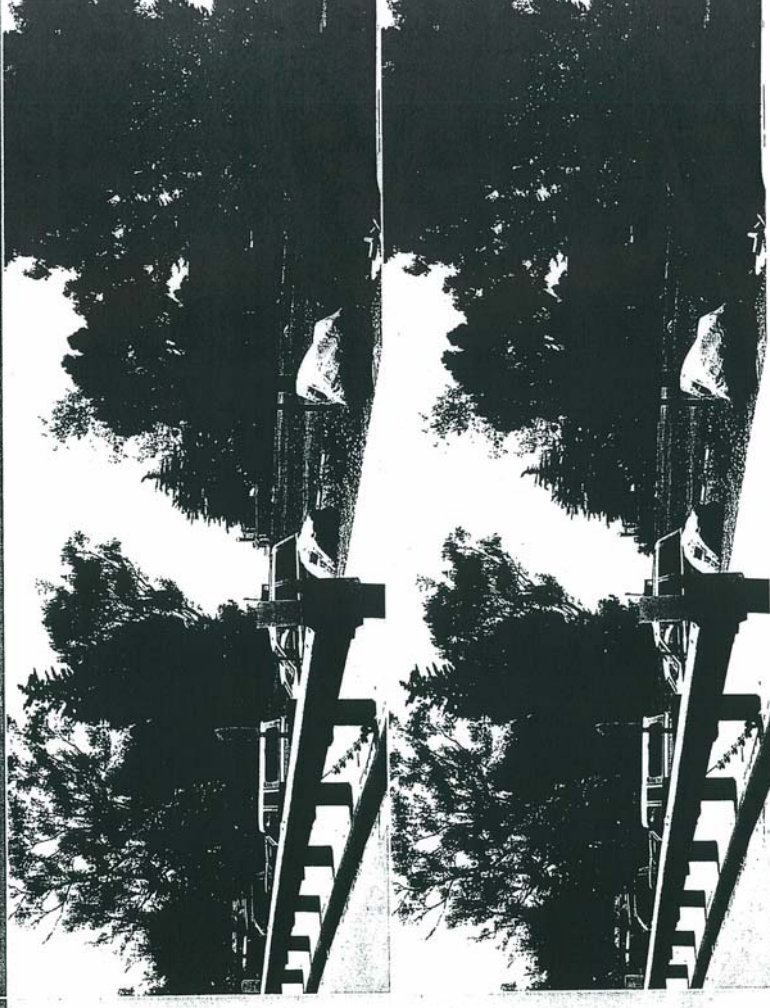
Location: Entrance to La Mesa Park at Meigs Road. In bike path before sidewalk.



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MP1 - Entrance to Parking Lot

Location: Entrance to La Mesa Park at Meigs Road. In bike path before sidewalk.

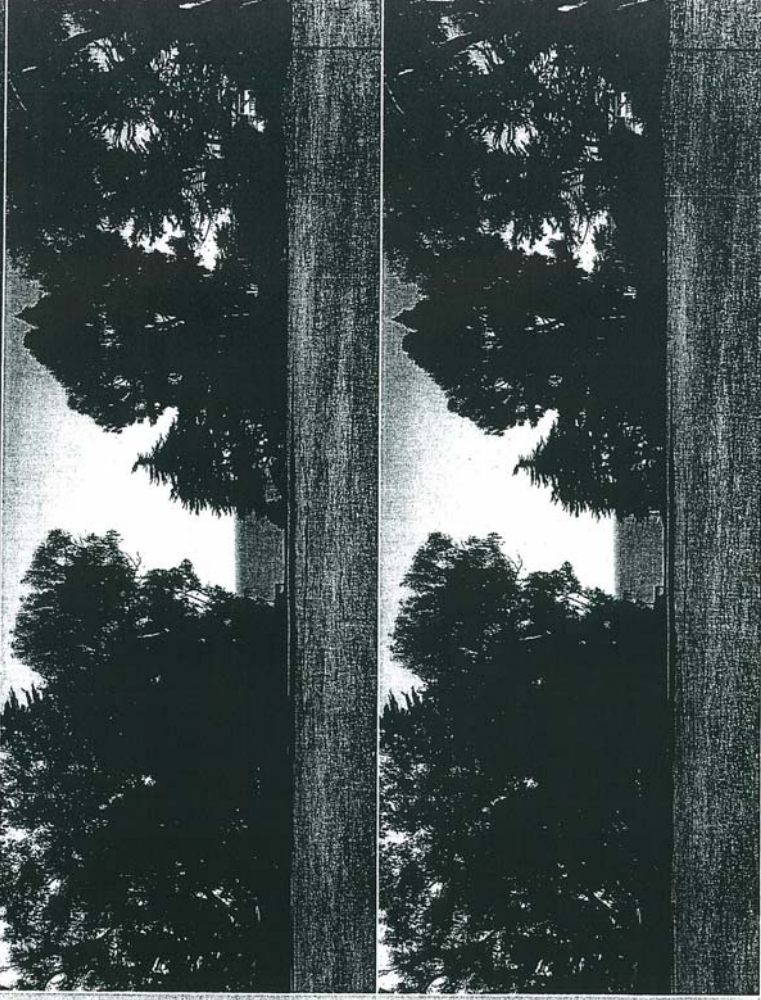


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MP2 - Lawn

Location: Upper portion of lower grass area oriented for maximum ocean view.



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MP2 - Lawn

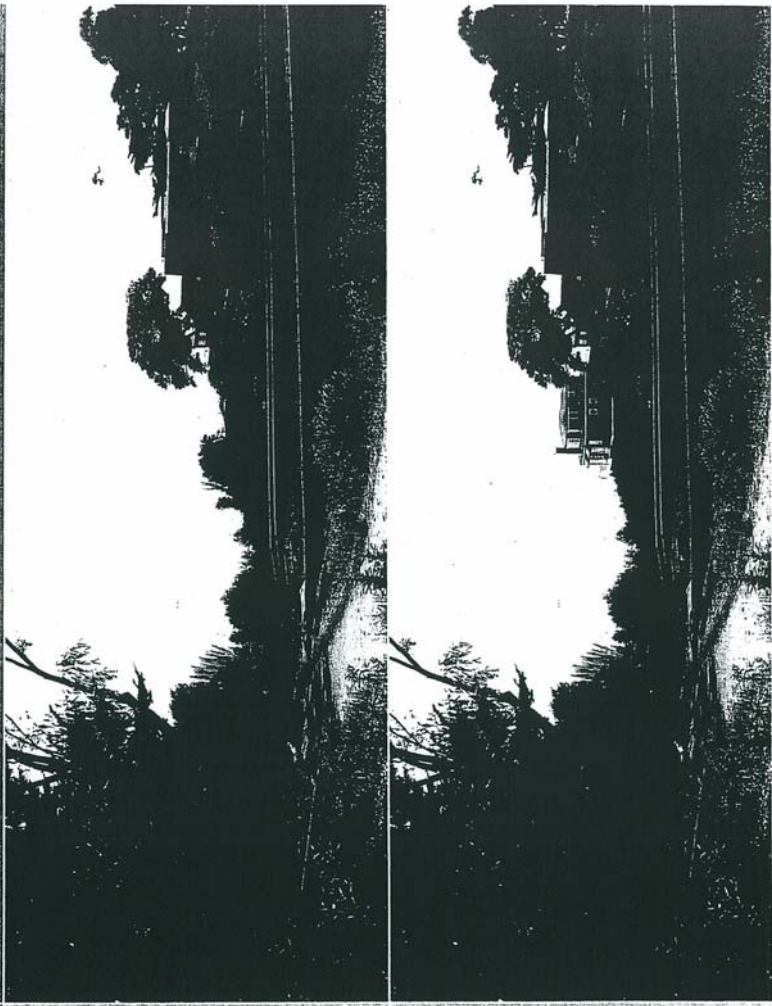
Location: Upper portion of lower grass area oriented for maximum ocean view.



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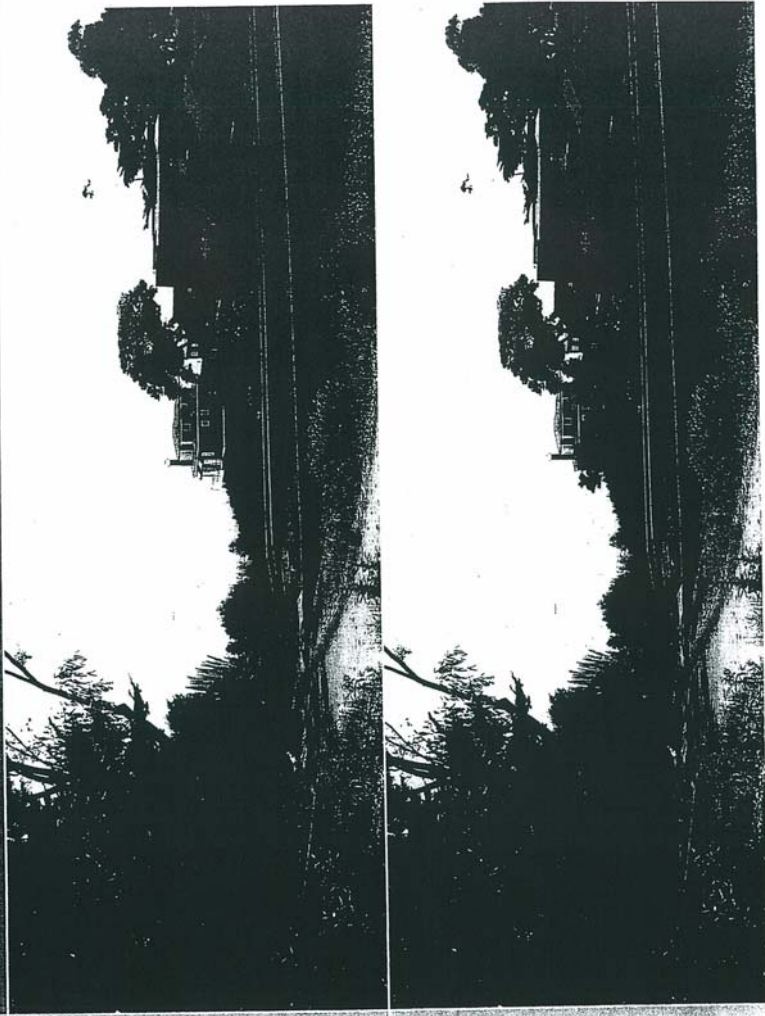


Location: Sitting on Northerly  
bench in La Mesa Park at  
East end of bridge.



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Location: Sitting on Northerly  
bench in La Mesa Park at  
East end of bridge.



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Location: East end of  
footbridge/bike path.

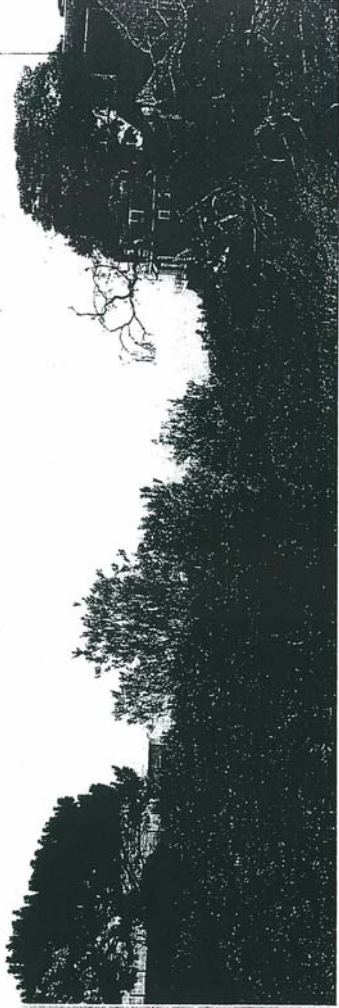


Location: East end of  
footbridge/bike path.



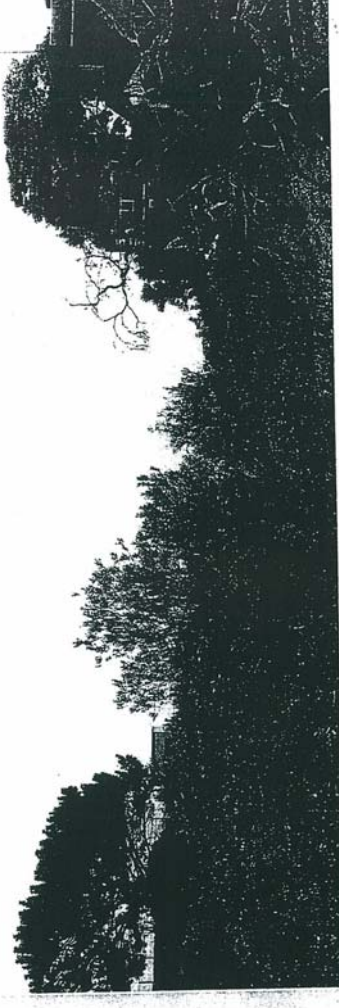
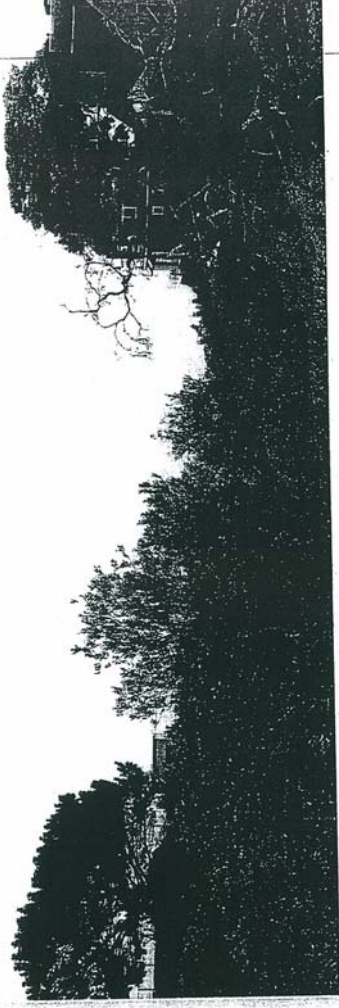


Location: Halfway point of  
footbridge/bike path.



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Location: Halfway point of  
footbridge/bike path.



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B1 - Beach 1

15

Location: South East side of property, standing on beach.



View: Upper level of structure exposed.

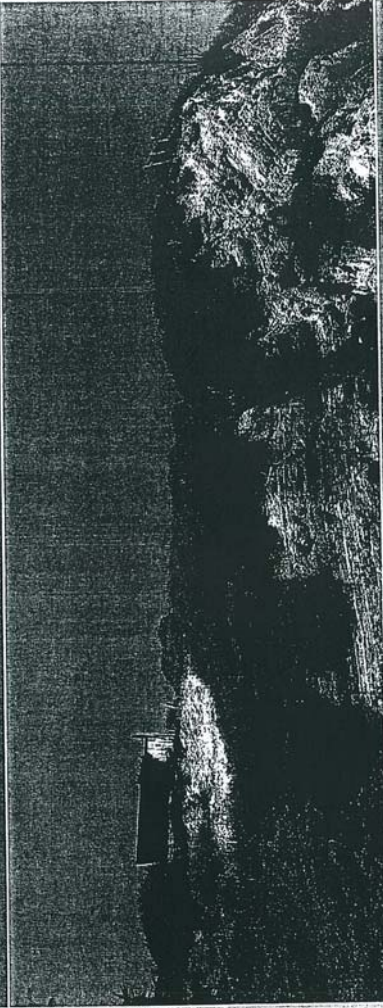


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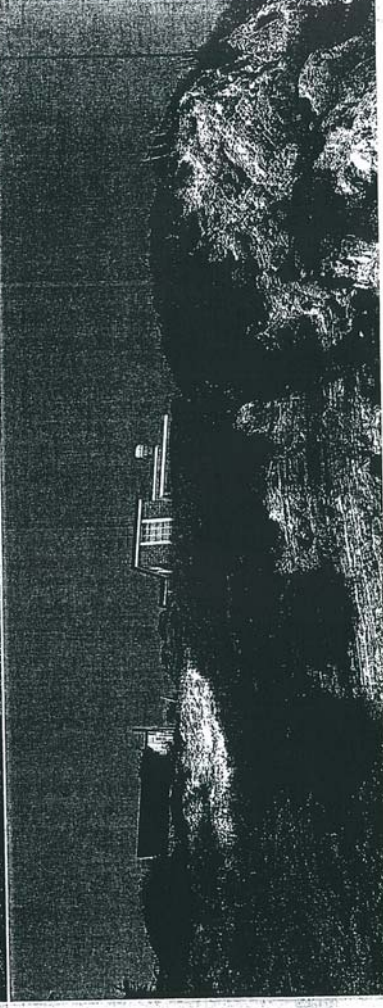
B2 - Beach 2

16

Location: South West side of property, standing below project site on outcrop on beach.



View: Upper level of structure exposed.



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B3 - Beach 3

17

Location: South West of property, standing on beach below property West of project.



View: Upper level of structure exposed.



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Appendix A

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These photo simulations were developed using:

- Architectural CAD files from Peikert Group Architects - Dated 11/4/03
- Topo CAD file provided by L&P Consultants
- Aerial photograph provided by L&P Consultants

Landscaping:

- Screen trees in photo simulations represent California Sycamores and Myoporum hedges at approximately 5 years growth.

Disclaimer

- The photo simulations were developed using Interacta's methodology process as described in appendix B.
- Interacta's methodology uses high end 3D software for generating simulated objects based on architectural CAD files, terrain surfaces based on topo data files and simulated camera locations based on actual photographs taken.
- Every effort has been made to make these photo simulations as accurate as possible based on the data provided.



**Biological Assessment**  
**1837½ El Camino de la Luz**  
**Santa Barbara, California**  
August 22, 2002  
*Revised December 12, 2002*  
*Revised January-February 2006*

Submitted by Rachel Tierney and Lawrence Hunt  
Submitted to L&P Consultants, 3 West Carrillo Street, Ste 205, Santa Barbara, CA 93101

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## I. Introduction

The project consists of construction of a new residence on a bluff-facing parcel in the Mesa neighborhood of the City of Santa Barbara (see Figure 1). The proposed home would include a 443-square foot garage and a 1,499-square foot residence consisting of a main and lower floor. The total footprint would be 1,400 square feet. *Revisions, requested in the 30-day development application review team comments dated September 25, 2002, are in Italics. Additional information appears in Sections IV (top of bank determination); V (impacts) and VI (mitigations).*

## II. Study Methodology

The site was visited by Rachel Tierney on September 14, 2001, and again on July 18, 2002 to confirm that conditions had not changed since the initial survey. The entire site was walked on foot, including the steep south- and east-facing slopes. Plant and animal species located during the site survey were identified. The quality of the existing habitat was evaluated based on size, continuity with adjacent parcels, species composition, and degree of disturbance.

In January and February 2006, Lawrence E. Hunt, wildlife biologist and herpetologist, conducted several protocol-level surveys for California red-legged frogs (CRLF) (*Rana aurora draytonii*) along Lighthouse Creek adjacent to the subject parcel. Other special-status wildlife species and their habitats also were evaluated at this time. The survey reach extended from the southern edge of La Mesa Park downstream to the mouth of the watercourse, a distance of approximately 1,000 feet. Two daytime and four nighttime surveys were conducted over a period of six weeks, according to U.S. Fish and Wildlife Service protocol (USFWS, 2005). The daytime surveys were conducted between 1300 hrs and 1600 hrs and consisted of walking the survey reach along the middle and edge of the creek and noting existing habitat conditions for amphibians in general and CRLF in particular.

The nighttime surveys were conducted between 1800 hrs and 2000 hrs and used a headlamp to detect amphibian eyeshine. Binoculars were used to identify eyeshine and/or individuals to species. The survey reach was walked twice during each daytime and nighttime survey. Details on dates, times, existing habitat conditions, and wildlife observations are summarized on data sheets in Appendix 1.

Information on sensitive resources within the project area was gathered from a review of previous biological reports and an examination of the Resource Maps housed at the Santa Barbara County Division of Environmental Review. These maps contain locations of sensitive species found in the herbaria of the Santa Barbara Botanic Garden and the University of California at Santa Barbara, as well as those recorded by the Natural Diversity Data Base (a statewide computerized inventory of location information on rare species and communities). The potential occurrence of special-status species in the project area was evaluated based on existing habitat conditions and known, nearby locations.

## III. Environmental Setting and Biotic Resources

The subject parcel lies on a bluff overlooking the Pacific Ocean, just west of Lighthouse Creek and La Mesa Park. It is presently vacant, but shows evidence of past improvements, including a brick planter and asphalt parking area. The proposed residential building site is more or less level, but the parcel is bordered on the south by an almost vertical bluff face that drops at least 60 feet to the beach below. Similarly, the eastern edge of the building site drops steeply (greater than 45 degree slope) to the nearly vertical banks of the channel of Lighthouse Creek. Existing residential development borders the subject parcel on the north and west.

**Lighthouse Creek.** Lighthouse Creek drains the smallest watershed found within the City of Santa Barbara (0.4 square miles) (URS, 2000). The creek extends from an apartment complex near Cliff Drive through La Mesa Park to the Pacific Ocean, a distance of less than 3,000 feet. Base flows occur throughout most of the year in the creek and are due to groundwater seepage and urban runoff (URS, 2000). The survey reach of the creek supported surface flows at the time of the field surveys for this document. The portion of the creek adjacent to the subject property is particularly steep due to a raised culvert upstream and bluff retreat at the beach. A terminal lagoon, characteristic of other creeks in the City, such as Arroyo Burro, Mission, Sycamore Canyon, and Laguna Channel, is absent here because the creek reaches the beach via a 15- to 20-foot drop from the bluff. The overall topographic gradient of this watercourse averages 6.7%, which is far steeper than other watercourses within the City limits (URS, 2000). Consequently, Lighthouse Creek tends to entrap little sediment and the reach between La Mesa Park and the beach is incised to a depth of at least 20 feet through Monterey shale bedrock.

Overall, canopy cover along Lighthouse Creek averages 90% according to the URS (2000) study, the highest of any of the urban creek they evaluated. Tree canopy consists largely of ornamental trees, particularly blue gum (*Eucalyptus globulus*). Canopy cover along the reach adjacent to the subject parcel is provided by intermittent, dense patches of arroyo willow (*Salix lasiolepis*) along the creek channel, as well as a variety of native and non-native, low-growing woody shrubs and herbaceous vegetation along the banks and upper slopes of the creek invert. In combination, these different types of vegetation in close proximity to each other provide dense, spatially variable, and moderately high quality cover and food resources for a variety of amphibians, reptiles, birds (including a wide variety of migratory passerines), and small mammals.

**Flora.** With the exception of the native plants found on the steep slopes facing the ocean and approaching the creek, the majority of vegetation on the subject parcel consists of species found on disturbed lots, including common garden escapees or remnants from previous use of the parcel. Outside the edges of the asphalt, the plateau is vegetated with a thick cover of iceplant and other non-native ornamental species such as oleander and yucca. Castor bean, English and German ivy form a thick mantle on the upper and mid-slopes leading to Lighthouse Creek. Native species seen on the upper and mid-level slope include arroyo willow, California blackberry (*Rubus ursinus*),



poison oak (*Toxicodendron diversilobum*), coyote bush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), and California fuchsia (*Epilobium canum*). Native plants become more common near the upper slopes of the creek invert.

The south-facing bluff contains a similar mix of ornamentals and garden escapes. Native plants become more common towards the top of the bluff where saltbush (*Atriplex breweri* and *A. californica*), coast goldenbush (*Isocoma vernonioides* ssp. *menziesii*) and lemonadeberry (*Rhus integrifolia*) dominate. Sensitive plants potentially occurring onsite are listed in the Appendix.

**Fauna.** Wildlife observed or expected to frequent this parcel are composed of species that are typically found in urbanized settings dominated by ornamental and/or ruderal vegetation. Common resident birds include mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), acorn (*Melanerpes formicivorus*) and Nuttall's woodpeckers (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), Pacific-slope flycatcher (*Empidonax difficilis*), northern mockingbird (*Mimus polyglottos*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), Bewick's (*Thryomanes bewickii*) and house wrens (*Troglodytes aedon*), Hutton's vireo (*Vireo huttoni*), European starling (*Sturnus vulgaris*), California towhees (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), Brewer's blackbird (*Euphagus cyanocephalus*), house sparrow (*Passer domesticus*), lesser goldfinch (*Carduelis psaltria*), and house finch (*Carpodacus mexicanus*). Eucalyptus trees, pines, and coast live oaks near the property are used for roosting and nesting by a number of urban raptor species, including turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*), Cooper's hawk (*Accipiter cooperi*), red-shouldered and red-tailed hawks (*Buteo lineatus* & *B. jamaicensis*), barn owl (*Tyto alba*), and great-horned owl (*Bubo virginianus*). These trees are probably also occasionally frequented by wintering sharp-shinned hawks (*Accipiter striatus*).

Amphibian, reptile, and land mammal diversity on the subject parcel is expected to be low and comprise urban-associated species or generalist species that can withstand high degrees of habitat disturbance. Species observed (bolded entries) or expected to occur within or adjacent to the subject parcel include: black-bellied slender salamander (*Batrachoseps nigriventris*), arboreal salamander (*Aneides lugubris*), western toad (*Bufo boreas*), Pacific treefrog (*Hyla regilla*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), ring-necked snake (*Diadophis punctatus*), broad-footed mole (*Scapanus latimanus*), California ground squirrel (*Spermophilus californicus*), Botta's pocket gopher (*Thomomys bottae*), deer mouse (*Peromyscus maniculatus*), dusky-footed woodrat (*Neotoma fuscipes*), house mouse (*Mus musculus*), black rat (*Rattus rattus*), Virginia opossum (*Didaphis virginiana*), raccoon (*Procyon lotor*), and possibly red fox (*Vulpes vulpes*), and coyote (*Canis latrans*). Because of the location at the coast and the presence of large, dense eucalyptus groves nearby, a variety of species of bats are expected to inhabit the Lighthouse Creek riparian corridor on a regular or seasonal basis, however, the subject parcel itself does not provide roosting or foraging habitat for bats.

#### IV. Special Studies

**California Red-legged Frog.** California red-legged frogs (CRLF) were not observed during the field surveys conducted for this document along the reach of Lighthouse Creek between the beach and the southern end of La Mesa Park. The amount of bank cover and the incidence of overhanging banks, formed either from vegetation or substrate, is high and generally provides good cover for CRLF. In-stream pools are generally lacking along the surveyed reach and those that are present are too shallow to support CRLF. URS (2000) indicates that more extensive pooled water occurs further upstream in this drainage, but these were not evaluated for this report. The upper banks adjacent to the subject parcel are densely vegetated and provide good cover for CRLF, if present. In general, aquatic conditions are lacking and terrestrial conditions are suitable for CRLF along the surveyed reach of Lighthouse Creek. Pools located upstream of the surveyed reach (not examined for this document) may be capable of supporting CRLF tadpoles, but the hydroperiod of these pools or other wetted reaches of Lighthouse Creek are unknown. CRLF larvae require at least 4 months to metamorphose (Jennings and Hayes, 1994).

California red-legged frogs are known from most of the streams along the south coast of Santa Barbara County between Point Conception and Carpinteria (Hunt, pers. observ), however they have not been found in any watercourses within the Santa Barbara City limits to date (CNDDDB, 2005). The urbanized portions of these watersheds have generally been modified to the point that they are incapable of supporting CRLF, but the middle and upper portions of the larger watersheds (e.g., Mission, Arroyo Burro) likely continue to harbor this species (Hunt, 2005). As with the City portions of other creeks, the reach of Lighthouse Creek adjacent to the subject parcel has a low to moderate potential to support CRLF.

**Other Special-Status Wildlife Species.** Table 2 in the Appendix summarizes the known or potential occurrence of other rare, threatened, or endangered wildlife species that are either known from or potentially occur in the project area. Potential occurrence is based on the known occurrence of a species in the project region (25-mile radius) and the presence of suitable habitat in the project area.

**Top of Bank Determination.** The top of bank, shown on Figure 2, was determined to be the point that the gentle and then moderately-steep slope intersects with the sheer bank leading down to the creek bed. The top of bank is located about 58 feet from the eastern (cantilevered) edge of the proposed residence.

**Monarch Butterfly Roosting Sites.** Three known monarch butterfly roosts occur within one mile of the subject parcel: Wilcox (Meade Site 83), La Mesa Park (Meade Site 84), and Honda Valley (Meade Site 85) (Figure 2). Monarch habitat on the Wilcox Property (Douglas Family Preserve) is located in the northeast corner of this park (Meade, 1999) and is classified as an autumnal site. The La Mesa Park site is situated at least 1,000 feet north of the subject parcel along the east side of Lighthouse Creek. The site has substantially changed since many large eucalyptus trees were lost in



1997 and 1998. Meade (1999) recorded a maximum of 103 butterflies at this site in 1998. Butterflies still use the area for autumnal aggregation and transitory clusters. The Honda Valley site, located further east near City College between Shoreline Drive and Cliff Drive, is an autumnal site that supports the largest aggregation of butterflies within the City limits (Meade, 1999).

## V. Project Impacts

**Short-Term Impacts to Biological Resources:** Each of the short-term impacts discussed below are considered potentially significant, but mitigable.

1. Impacts to aquatic-associated sensitive amphibians and reptiles in Lighthouse Creek: There is a low probability that CRLF inhabit Lighthouse Creek downslope of the project area, based on existing aquatic conditions. Consequently, it is unlikely that this project will affect CRLF.

Aquatic habitat as well as upland habitat on slopes below the proposed building site is suitable for two-striped garter snake (*Thamnophis hammondi*), a California Species of Special Concern. This species could be adversely affected by grading and vegetation removal along the western slope above Lighthouse Creek and by sedimentation of the creek as a result of soil disturbance.

2. Impacts to other wildlife: The slopes below the proposed building site also support at least two species of non-regulated amphibians, including Pacific treefrog (*Hyla regilla*) and black-bellied slender salamander (*Batrachoseps nigriventris*), as well as providing foraging, roosting, and/or breeding habitat for a variety of small mammals and migratory and resident birds. The location of the proposed project on the bluff adjacent to a watercourse is particularly attractive to migratory birds, which use features such as riparian corridors along the coast as stopping points during migration. Resident species with limited dispersal abilities, such as amphibians, reptiles, and small mammals, as well as migratory species could be adversely affected by grading, vegetation removal, and soil erosion of the slopes between the proposed building pad and Lighthouse Creek.
3. Impacts to water quality in Lighthouse Creek could occur if construction debris (including soil erosion) were to be dumped or to wash into the channel.

**Long-Term Impacts to Biological Resources:** The following impacts are considered adverse, but insignificant.

1. Proposed development at this location will have little effect on the current habitat values of the creek or adjacent slopes, if the proposed mitigation measures are successfully implemented.
2. The creek's short stretch and outlet location high above the beach precludes its use as a fish passage.
3. The area is already heavily developed and vegetation consists entirely of invasive non-natives

on the upper slopes. The addition of one additional residence would not create significant new disturbance into areas that are already heavily urbanized.

4. It is expected that wildlife that use the canopy of the creek-flanking vegetation will continue to do so because the elevational difference between the creek and the residences (proposed and existing) create a barrier to human intrusion.
5. Domestic and feral cats are significant predators of reptiles, birds, and small mammals. The addition of one additional residence with cats to this already urbanized setting would not constitute a significant incremental impact.
6. No significant impacts to monarch butterflies are identified. The site is a minimum of 600 to 1,000 feet from the small autumnal roosting site in Lighthouse Creek adjacent to La Mesa Park. No removal of potential roosting habitat (e.g., eucalyptus trees) is proposed.

## VI. Recommended Mitigation Measures

1. Prior to initial site grading, construction fencing of a mesh size small enough to trap soil (such as silt fence) shall be installed along the edge of the grading area on the slopes above Lighthouse Creek. This fencing shall be maintaining in place for the duration of grading and slope stabilization activities.
2. Vegetation removal in graded areas on slopes above Lighthouse Creek shall be removed by hand and dragged upslope to the building pad in order to minimize adverse impacts to wildlife. Vegetation removal shall be limited to the minimum necessary to proceed with construction.
3. A qualified wildlife biologist shall be present during initial site grading and vegetation removal on the slopes in order to salvage and relocate any animals uncovered during these activities.
4. All Best Management Practices (BMPs) shall be employed to prevent soil erosion during construction and to maintain water quality in Lighthouse Creek. Bare soil on slopes shall be covered with erosion control blankets and seeded with a native grass and shrub seed mix to prevent short-term erosion if construction extends into the rainy season. Straw rolls may be used as water bars to interrupt runoff until slopes are vegetated.
5. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed using hand and chemical methods, from all areas disturbed by construction on the slope between the proposed building site and Lighthouse Creek. The removal shall occur under the supervision of a qualified habitat restoration biologist and this material shall be disposed of in a manner that will not result in further spread of these species.
6. Disturbed soils on the slope between the proposed building pad and Lighthouse Creek shall be planted with drought tolerant, native, locally-occurring plants species to improve habitat values for wildlife in this area. The addition of native trees and shrubs along the mid point of the slope would improve the habitat now in place. Native container material can include: coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), encelia (*Encelia californica*), California blackberry (*Rubus ursinus*), California fuchsia (*Epilobium canum*), saltbush (*Atriplex*

breweri and *A. californica*), coast goldenbush (*Isocoma vernonioides* ssp. *menziesii*), elderberry (*Sambucus mexicana*) and lemonadeberry (*Rhus integrifolia*).

## VII. References

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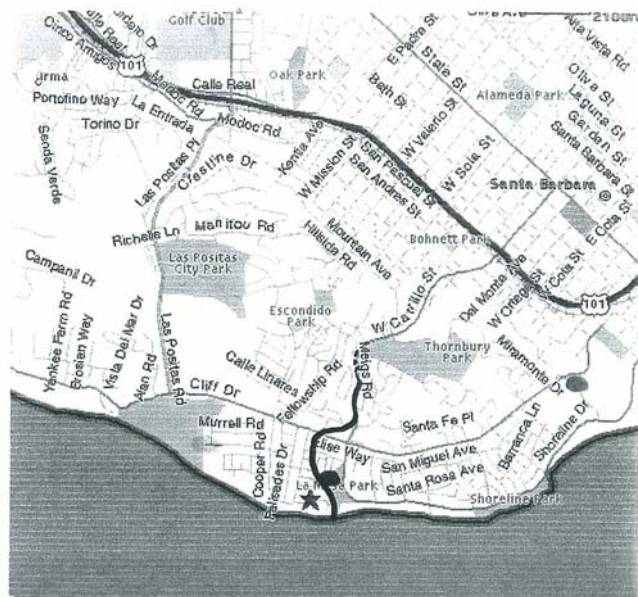
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# 1837 1/2 EL CAMINO DE LA LUZ BIOLOGICAL RESOURCES

- ★ Project Site
- ~ Lighthouse Creek
- Nearby Butterfly Aggregation Sites
- Wilcox
- La Mesa
- Honda Valley

Figure 1

1837 1/2 El Camino De La Luz  
Biological Resources

1 inch = 3360 feet

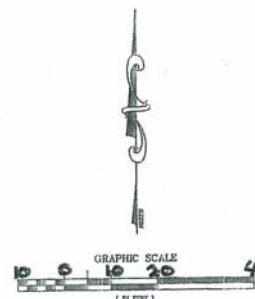


Figure 2

1837 1/2 El Camino De La Luz  
Site Plan



## APPENDIX A: SPECIAL-STATUS BIOLOGICAL RESOURCES

A "special-status biological resource" refers to any rare, threatened or endangered plant or animal species. Habitats are also considered sensitive if they exhibit a limited distribution, have high wildlife value, contain sensitive species or are particularly susceptible to disturbance. These resources are protected by a variety of federal, state and local policies and programs.

### REGULATORY SETTING

#### Federal and State Policies

The Federal Endangered Species Act of 1973 and the published list of endangered and threatened species provide legal protection for threatened and endangered taxa nationwide. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over the federal program.

California has a similar mandate embodied in the California Endangered Species Act of 1970 and its corollary laws: the California Species Preservation Act of 1980 and the California Native Plant Protection Act of 1977. The California Department of Fish and Game (CDFG), along with recommendations from the California Native Plant Society (CNPS), has jurisdiction over the California Species Protection Laws. The CDFG has also identified some wildlife species as "of special concern" (CDFG, 2005; Jennings and Hayes 1994; Remsen, 1978; Williams, 1986). These are species that are either biologically rare, very restricted in distribution, or declining throughout their range.

Many species qualify for formal protection under the California Environmental Quality Assurance Act (CEQA, State of California, 1986), even if these plants are not registered under state or federal programs. These include the majority of plants on CNPS Lists 1 and 2 (described below), as well as species that are identified by local authorities as rare, endangered or threatened, regardless of recognition by the USFWS, CDFG or the CNPS.

In addition to the programs described above, the CNPS compiles their own inventory, which includes state- and federally- recognized rare plant species, as well as those plants determined to be rare by this organization. The CNPS maintains several "lists" in an effort to categorize degrees of concern (CNPS 1994). List 1A includes plants assumed extinct in California. List 1B includes species which are rare, threatened or endangered in California and elsewhere. List 2 includes plants rare in California, but more common elsewhere. List 3, a review list, contains species which require more information. List 4 is a watch list, containing species of limited distribution.

#### Local Programs

In addition to the federal- and/or state-listed species, candidates for listing and species of special concern, there are a number of "local concern" species that have been identified by local authorities

as rare or declining in the Santa Barbara region. Included with these regionally rare species are many plants that are considered to be local "endemics" (occurring within a very limited region). While these species have no formal legislative protection, they may be granted protection in the future if their populations continue to decline. Many of these species are on one or more "watch lists" such as CNPS (1988) for plants and the Audubon Society's "Blue List" for birds, or have been found by local biologists to be rare or declining in the Santa Barbara region. At this time, the City of Santa Barbara does not provide any special protection for these regionally rare or declining taxa. However, because these species are considered by local authorities to be of importance, they are included for planning purposes in the following discussion of sensitive plant and animal resources found at the proposed project sites.

The Santa Barbara City's Master Environmental Assessment (City of Santa Barbara, 1981) provides limited protection for sensitive biological resources that occur within the City. The MEA designates one community found within the park (riparian woodland/creeks) as particularly sensitive and provides specific mitigation measures designed to reduce possible impacts from developments. The MEA also provides a list of mitigation measures designed to protect remaining oak woodland habitats within the City.

Sensitive plants and animals that may be found near the subject property are listed below, along with anticipated impacts resulting from this project.

**Table 1: SPECIAL-STATUS PLANTS**

There are no listed or proposed species under either the State or Federal Endangered Species Act, or CNPS List 1B plants, expected within the vicinity of the site. The following plant species have been located in nearby, similar habitats. Included in this list are "endemics," or taxa, that are only found within a very limited area. Others are listed with the California Native Plant Society (CNPS) as plants of limited distribution (List 4).

STATUS	DISTRIBUTION AND POSSIBLE IMPACTS
<i>Baccharis plummerae</i> (Plummer's Baccharis) <b>Status: CNPS List 4.3</b> LIST 4: Limited distribution (Watch List). 0.3: Not very endangered in California (<20% of occurrences threatened)	Found in shaded sites, typically on slopes above drainages. This woody plant was not seen during site surveys. <b>Impact: Less than significant</b>
<i>Lonicera subspicata</i> ssp. <i>subspicata</i> (Santa Barbara Honeysuckle) <b>Status: CNPS 1B.2</b> 1B: Rare, threatened, or endangered in California and elsewhere. 0.2: Fairly endangered in California (20-80% occurrences threatened)	Common and found in many plant communities on southern side of the Santa Ynez Mountains from Goleta to Carpinteria. This woody plant was not seen during site surveys. <b>Impact: Less than significant</b>



Table 2: Special-Status Wildlife Species Reviewed For This Document <sup>(a)</sup>

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Known (bolded text) or Potential Occurrence in Region and Project Site <sup>(c)</sup>
<b>INSECTS</b>				
Globose dune beetle	<i>Coelus globosus</i>	FSS	Sandy beach	Known from beach dunes around mouth of Arroyo Burro Creek, approx. 1.5 miles W of project area; low to no potential for occurring on beach around mouth of in Lighthouse Creek because of lack of suitable dune habitat
Sandy beach tiger beetle	<i>Cicindela hirticollis gravida</i>	FSS	Sandy beach	As above
Frost's tiger beetle	<i>Cicindela senilis frosti</i>	FSS	Sandy beach; salt marsh	As above
Monarch butterfly	<i>Danaus plexippus</i>	CSC	Eucalyptus windrows (roost sites); grassland and scrub (foraging habitat)	Three known roosts occur within one mile of subject parcel; La Mesa Park autumnal roost is approx. 1,000 feet north and east of subject parcel; no potential for occurring on subject parcel due to lack of suitable habitat
<b>FISHES</b>				
Southern steelhead	<i>Oncorhynchus mykiss</i>	FE/CSC	Anadromous—adults live in ocean, but return to natal watercourse to spawn	Occurs in other nearby coastal drainages, but no potential for occurring in Lighthouse Creek because terminal end of watercourse contacts beach and ocean via a 15-20-foot high vertical cliff; watercourse is too small to support resident (land-locked) rainbow trout
Tidewater goby	<i>Eucyclogobius newberry</i>	FE/CSC	Low salinity terminal lagoons and lower watercourses of coastal drainages	Occurs in nearby coastal lagoons, such as Arroyo Burro Creek and Mission Creek; no potential for occurring in Lighthouse Creek because terminal end of watercourse contacts beach and ocean via a 15-20-foot high vertical cliff.

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations
<b>AMPHIBIANS</b>			
California red-legged frog	<i>Rana aurora draytonii</i>	FT/CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)
Coast Range newt	<i>Taricha torosa torosa</i>	CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)
<b>REPTILES</b>			
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	CSC	Oak woodland, coastal scrub, dune scrub, chaparral on sandy soils
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	CSC	Riverine, freshwater marsh, lakes, reservoirs, riparian scrub
Two-striped garter snake	<i>Thamnophis hammondi</i>	CSC	Riverine and adjacent scrub habitats; freshwater marsh, lakes, reservoirs, riparian scrub

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Common Name
Allen's hummingbird	<i>Selasphorus sasin</i>	MNBMC	BIRDS Riparian and eucalyptus woodland and riparian scrub (nesting)	Observed in eucalyptus grove in La Mesa Park (Hunt, pers. observ.); probably occasionally frequents project site and Lighthouse Creek area while foraging
Bank swallow	<i>Riparia riparia</i>	ST	Riparian woodland	Historically nested in cliffs at mouth of Arroyo Burro Creek and elsewhere along coast; no longer breeds in County (Lehman, 1994); cliffs adjacent to project site provide suitable nesting and roosting habitat for this species, but species is now a rare spring and fall transient to area
Black swift	<i>Cypseloides niger</i>	CSC	Grasslands, riparian corridors, scrub	Rare and irregular spring transient along coast
Burrowing owl	<i>Athene cunicularia</i>	CSC	Grasslands, open scrub	Occasionally found on More Mesa approx. 4 miles W of project site; no potential for occurring on project site
California brown pelican	<i>Pelecanus occidentalis californicus</i>	FE/SE	Beach and nearshore waters	Commonly observed foraging in nearshore waters and occasionally roosting on beaches adjacent to site.
Cooper's hawk	<i>Accipiter cooperi</i>	CSC	Oak woodland, riparian woodland, riparian scrub	High probability of roosting and possibly nesting in eucalyptus groves around La Mesa Park; may forage along Lighthouse Creek
California horned lark	<i>Eremophila alpestris actia</i>	CSC	Grassland, open scrub	Fall and winter transient to grasslands in Elings Park, approx. one mile NW of project site; no suitable habitat on project site
California thrasher	<i>Toxostoma redivivum</i>	MNBMC	Coastal scrub, chaparral, riparian scrub	Observed in coastal sage scrub in Elings Park, approx. one mile NW of project site; no suitable habitat on site
Grasshopper sparrow	<i>Ammodramus saviannarum</i>	CSC/SLC	Grasslands, open scrub	May occur in grassland habitats at Elings Park, approx. one mile NW of project site; no suitable habitat on site
Lark sparrow	<i>Chondestes grammacus</i>	MNBMC	Grasslands, agricultural fields	May occur in grassland habitats at Elings Park, approx. one mile NW of project site; no suitable habitat on site
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE	Riparian woodland	No potential; riparian corridor in Lighthouse Creek is not developed enough to support this species

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Common Name
Loggerhead shrike	<i>Lanius ludovicianus</i>	CSC	Coastal scrub, open chaparral, oak savannah	Known from riparian scrub in lower Arroyo Burro Creek area and Elings Park; may occasionally forage in lower Lighthouse Creek
Long-billed curlew	<i>Numenius americanus</i>	CSC	Grasslands	Regularly observed on beaches adjacent to project site; may also forage in grasslands in Elings Park, approx. one mile NW of project site; no suitable foraging habitat on project site
Northern harrier	<i>Circus cyaneus</i>	CSC	Grasslands, open coastal scrub, chaparral	Winter visitor to grasslands at Elings Park, approx. one mile NW of project site; no suitable foraging or roosting habitat in or around project site
Olive-sided flycatcher	<i>Contopus cooperi</i>	MNBMC	Riparian woodlands	Moderate potential of occurring in Lighthouse Creek riparian corridor adjacent to project site
Osprey	<i>Pandion haliaetus</i>	CSC	Nearshore waters, lagoons, reservoirs	Observed foraging along beaches in vicinity of project site (e.g., Arroyo Burro, East Beach)
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	MNBMC	Riparian woodland, riparian scrub	High potential of foraging and possibly nesting in Lighthouse Creek riparian corridor
Purple martin	<i>Progne subis</i>	CSC	Riparian woodlands, riparian scrub, grasslands	Very rare spring and fall transient to area; low potential of foraging in Lighthouse Creek riparian corridor
Red-breasted sapsucker	<i>Sphyrapicus ruber</i>	MNBMC	Riparian woodland, conifers, exotic trees	Uncommon transient and winter visitor to woodlands along coast; moderate potential in ornamental trees around project site
Sharp-shinned hawk	<i>Accipiter striatus</i>	CSC	Riparian and oak woodland	Winter visitor to woodlands; moderate potential of roosting and foraging in eucalyptus groves in La Mesa Park and along Lighthouse Creek
Short-eared owl	<i>Asio flammeus</i>	CSC	Freshwater marsh, grasslands	Historical record from lower portions of Arroyo Burro Creek watershed; no suitable habitat in project site or Lighthouse Creek
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	CSC	Coastal scrub, chaparral, rocky grassland	No suitable habitat in or around project site



Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Common Name
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	FE/SE	Riparian woodland	Uncommon fall transient to riparian woodlands along coast (especially willow woodlands); nearest breeding records are from Santa Ynez River watershed; low potential for occurring in Lighthouse Creek as a fall transient due to lack of habitat
Swainson's thrush	<i>Catharus ustulatus</i>	SLC	Riparian woodland	Uncommon spring transient and summer breeder; moderate to high potential of foraging and possibly nesting in Lighthouse Creek woodland habitats
Vaux's swift	<i>Chaetura vauxi</i>	FSS/CSC	Riparian woodland, riparian scrub, grassland	Uncommon and irregular transient; high probability of occurring along coast in vicinity of project site
Warbling vireo	<i>Vireo gilvus</i>	SLC	Riparian woodland	Low to moderate potential for occurring in Lighthouse Creek due to lack of suitable habitat
Western meadowlark	<i>Wilsonia pusilla</i>	SLC	Grassland, agricultural fields	Commonly observed in grasslands in Elings Park, approx. one mile NW of project site; no potential in vicinity of project site due to lack of habitat
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT/CSC	Beach, sand dunes	<b>Occasionally observed foraging on beach near mouth of Arroyo Burro Creek; recent (2005) breeding record at East Beach near mouth of Mission Creek;</b> beach adjacent to project provides foraging habitat for species
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	PE/SE	Riparian woodland	Very rare migrant along coast; recorded at Carpinteria in 1990s in winter; riparian habitat in Lighthouse Creek is not sufficiently developed to support this species
White-tailed kite	<i>Elanus leucurus</i>	FP	Grassland, eucalyptus woodland, orchards	<b>Large communal roosts in oaks on More Mesa 4 miles W of project site; occasionally observed foraging in grasslands in Elings Park, approx. 1 mile NW of project site;</b> no potential in project site due to lack of suitable foraging and roosting habitat
Wilson's warbler	<i>Catharus ustulatus</i>	SLC	Riparian woodland, riparian scrub	<b>Fairly common transient in riparian woodlands along coast in spring;</b> moderate to high potential of occurring in Lighthouse Creek habitats in spring

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Common Name
Yellow warbler	<i>Dendroica petechia brewsteri</i>	CSC	Riparian woodland	<b>Common spring and fall transient and breeder in riparian woodlands;</b> high probability of foraging in Lighthouse Creek in spring, but probably not breeding there
Yellow-breasted chat	<i>Icteria virens</i>	CSC	Riparian woodland	<b>Spring and fall transient and local breeder in riparian woodlands along Arroyo Burro Creek and Mission Creek;</b> may forage along Lighthouse Creek, but does not breed there
<b>MAMMALS</b>				
American badger	<i>Taxidea taxus</i>	CSC	Grassland, riparian scrub, open chaparral and coastal scrub	Likely formerly occurred in coastal grasslands and open coastal sage scrub throughout Mesa area; no suitable habitat in vicinity of project site
Big free-tailed bat	<i>Myotisotis macrotis</i>	CSC	Riparian woodland	May occasionally forage along Lighthouse Creek, but project site or adjacent areas do not support suitable roosting habitat
Fringed myotis	<i>Myotis thysanodes</i>	CSC	Riparian woodland, grasslands	May occasionally forage along Lighthouse Creek, but project site or adjacent areas do not support suitable roosting habitat
Pallid bat	<i>Antrozous pallidus</i>	CSC	Grasslands, open scrub, riparian woodland	May forage along Lighthouse Creek, but project site does not support suitable roosting habitat
Red bat	<i>Lasiurus blossevillii</i>	CSC	Riparian woodland, oak woodland	May occasionally forage along Lighthouse Creek, but project site does not support suitable roosting habitat
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	CSC	Rocky coastal scrub and chaparral	Known from UPRR right-of-way east and west of Santa Barbara; low probability of occurrence in coastal sage scrub in Elings Park area, NW of project site; project site does not contain suitable habitat for this species
Townsend's big-eared bat	<i>Corynorhinus townsendii townsendii</i> and <i>C.t. pallascens</i>	CSC	Riparian woodland, grasslands	<b>Known from middle and upper portions of Arroyo Burro Creek watershed;</b> little or no potential of using Lighthouse Creek as foraging habitat

Common Name	Scientific Name	Regulatory Status <sup>(b)</sup>	Habitat Associations	Common Name
Western mastiff bat	<i>Eumops perotis</i>	CSC	Riparian woodland, rocky chaparral	May occur along upper watersheds of larger area drainages; no potential along Lighthouse Creek
Yuma myotis	<i>Myotis yumanensis</i>	CSC	Riparian woodland, aquatic habitats, freshwater marsh; roosting habitat north of project area	Relatively common along riparian corridors in area; low to moderate potential of using Lighthouse Creek as foraging habitat, eucalyptus groves in La Mesa Park may provide suitable temporary roosting habitat

(a) Species are arranged alphabetically within broad taxonomic groups

(b) Status Key:

FE = listed as Endangered by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act

PE = proposed for listing as Endangered under the Federal Endangered Species Act

FT = listed as Threatened by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act

SE = listed as Endangered by the California Department of Fish and Game under the California Endangered Species Act

ST = listed as Threatened by the California Department of Fish and Game under the California Endangered Species Act

FSS = Federal Sensitive Species (i.e., on "watch list" maintained by U.S. Fish and Wildlife Service, Bureau of Land Management, and U.S. Forest Service)

MN/BMC = Migratory Non-Game Bird Species of Management Concern; species of migratory non-game birds that are considered by the U.S. Fish and Wildlife Service to be of concern because of small population size, specialized habitat requirements, and/or population declines

FP = Listed as Fully Protected by the California Department of Fish and Game

CSC = California Species of Special Concern (CDFG, 2005)

SLC = Species of Local Concern; protected by one or more City and County resource management policies

(c) Potential for particular species occurrence in vicinity of project site is based on known occurrence in region and presence of suitable habitat in and around project site.

# Appendix B California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Site Assessment: JAN 11, 2006  
(mm/dd/yyyy)

Site Assessment Biologists: HUNT LAWRENCE E.  
(Last name) (first name) (Last name) (first name)

\_\_\_\_\_  
(Last name) (first name) (Last name) (first name)

Site Location: CA: SANTA BARBARA CO., SANTA BARBARA, LIGHTHOUSE CREEK BETW. LA MESA PARK & OCEAN.  
(County, General location name, UTM Coordinates or Lat/Long, or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: 1837 1/2 EL CAMINO DE LA LUZ BIOLOGICAL ASSESSMENT  
Brief description of proposed action:  
CONSTRUCTION OF SINGLE-FAMILY RESIDENCE ON EXISTING PAD WEST OF LIGHTHOUSE CREEK.

- 1) Is this site within the current or historic range of the CRF (circle one)? YES ☒ NO ☐
- 2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES ☐ NO ☒  
If yes, attach a list of all known CRF records with a map showing all locations.

## **GENERAL AQUATIC HABITAT CHARACTERIZATION** (if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:  
Size: N/A Maximum depth: N/A  
Vegetation: emergent, overhanging, dominant species: N/A  
Substrate: N/A  
Perennial or Ephemeral (circle one). If ephemeral, date it goes dry: N/A



2

## Appendix B

## California Red-legged Frog Habitat Site Assessment Data Sheet

## STREAM:

Bank full width: 6-8 FT  
 Depth at bank full: < 12 INCHES  
 Stream gradient: STEEP - 3 TO 7%

Are there pools (circle one)? YES NO UPSTREAM OF SURVEY REACH  
 If yes,

Size of stream pools: 20 FT LONG X 8 FT WIDE  
 Maximum depth of stream pools: 14 INCHES  
 in SURVEY REACH

Characterize non-pool habitat (run, riffle, glide, other): SHALLOW (< 12") RUNS, SHORT RIFFLES, RELAT. STEEP STREAM GRADIENT (4-7%)

Vegetation: emergent, overhanging dominant species: SALIX LASIOLEPS, RUBUS URSINUS, TOKODENDRON DIVERSIFOLIUM, JUNCUS MEXICANUS, PARAPORTULIS, ARTEMESIA CALIFORNICA, BACCHARIS PALLIDUS, RICINUS COMMUNIS  
 Substrate: MONTEREY SHALE, SOME FINE SEDIMENTS, MOSTLY EXPOSED BEDROCK

Bank description: NEARLY VERTICAL AT CREEK LEVEL, SOME OVERHANGS, 30°-45° BANK SLOPE UP TO T.O.B.

Perennial or Ephemeral (circle one). If ephemeral, date it goes dry: EARLY TO MID-SUMMER

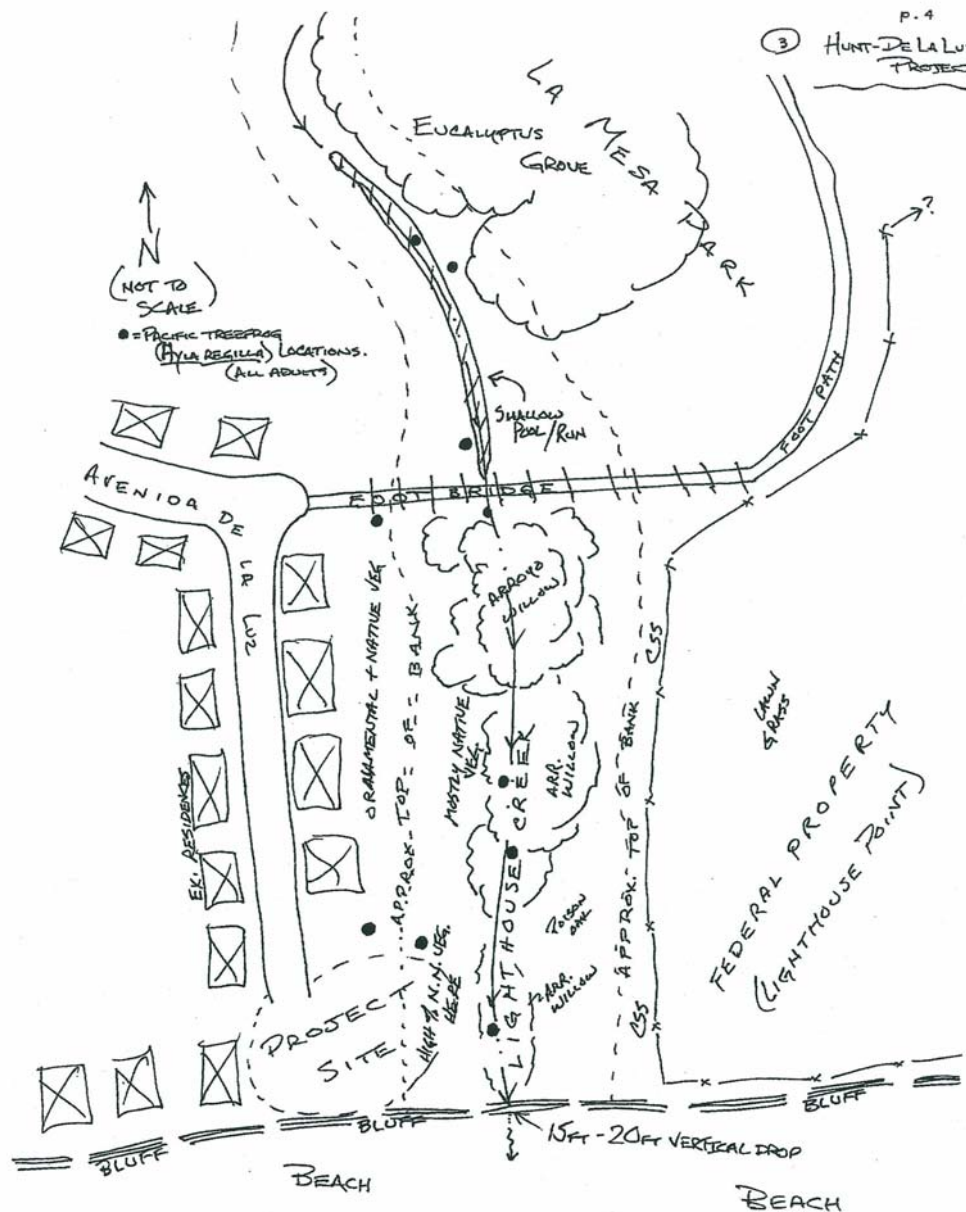
Other aquatic habitat characteristics, species observations, drawings, or comments:

DRAINAGE IS SMALL (< 3000 FT TOTAL LENGTH) - STEEP, AND TOTALLY URBANIZED;  
NO POOLS LG. OR DEEP ENOUGH TO SUPPORT CRTG. BREEDING HABITAT;  
UPLAND HABITAT ON BANKS IS MOD. TO HIGH-QUALITY FOR DISPERSAL,  
FORAGING, A/L OVERWINTERING.

## Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs - SEE APP. 1 OF BIO. ASSESSMENT REPORT
3. Maps with important habitat features and species location \* SEE FIELD SITE MAP ATTACHED

3 HUNT-DE LA LUZ PROJECT



(4)

Appendix E. B  
California Red-legged Frog Survey Data Sheet

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: FEB 6 2006 Survey Biologist: HUNT LAWRENCE E.  
(mm/dd/yyyy) (Last name) (first name)

Survey Biologist: \_\_\_\_\_  
(Last name) (first name)

Site Location: see previous sheets  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: AVENIDA DE LA LUZ B.A.  
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 2000 hrs. End Time: 2130 hrs.

Cloud cover: clear Precipitation: none

Air Temperature: 55°F Water Temperature: 62°F

Wind Speed: 10 mph Visibility Conditions: excellent

Moon phase: 50% Humidity: ?

Description of weather conditions: \_\_\_\_\_

Brand name and model of light used to conduct surveys: West Lamp

Were binoculars used for the surveys (circle one)? YES NO  
Brand, model, and power of binoculars: Nikon Naturalist 8x40

(4A)

Appendix E. B  
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<u>Hyla regilla</u>	<u>5</u>	<u>200, 3H</u>	<u>adult</u>	<u>adult</u>	<u>100%</u>

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons:

salmon and stream tracks

Other notes, observations, comments, etc.

see 11 Jan 06 sheet

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix E. B  
California Red-legged Frog Survey Data Sheet

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: JAN 11, 2006 Survey Biologist: HUNT LAURENCE E.  
(mm/dd/yyyy) (Last name) (first name)  
Survey Biologist: \_\_\_\_\_  
(Last name) (first name)

Site Location: CA: SANTA BARBARA CO., SANTA BARBARA LIGHTHOUSE CREEK BETW.  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S). LA JESITA PARK  
3 OCEAN.  
\*\*ATTACH A MAP (include habitat types, important features, and species locations)\*\*

Proposed project name: 1837 1/2 EL CAMINO DE LA LUZ BIOLOGICAL ASSESSMENT  
Brief description of proposed action:

CONSTRUCTION OF SINGLE-FAMILY RESIDENCE ON EXISTING PAD  
W OF LIGHTHOUSE CREEK

Type of Survey (circle one) DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 1330 HRS; 1830 hrs. End Time: 1615 HR; 2030 hrs.

Cloud cover: CLEAR Precipitation: NONE

Air Temperature: 62F - 53F Water Temperature: 59°F

Wind Speed: 5-10 MPH Visibility Conditions: EXCELLENT

Moon phase: N/A Humidity: ?

Description of weather conditions: \_\_\_\_\_

Brand name and model of light used to conduct surveys: WHEAT LAMP

Were binoculars used for the surveys (circle one)? YES NO

Brand, model, and power of binoculars: NIKON NATURALIST - 8x40

11 Jan 2006 - L.E. HUNT  
Appendix E. B  
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

	Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
DAY	<u>HYLA REGILLA</u>	<u>2</u>	<u>O</u>	<u>ADULT</u>	<u>ADULT</u>	<u>100%</u>
DAY	<u>BATRACHOSEPS NIGRI-VENTRIS</u>	<u>1</u>	<u>O</u>	<u>ADULT</u>	<u>ADULT</u>	<u>100%</u>
NIGHT	<u>HYLA REGILLA</u>	<u>15</u>	<u>H</u>	<u>ADULT</u>	<u>ADULT</u>	<u>100%</u>

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: RACCOON & POSSUM TRACKS;  
CAT TRACKS

Other notes, observations, comments, etc.

STREAM IS FLOWING, BUT MAX. DEPTH OF RUNS IS <15", AVG. 8" DEEP  
WATER CLEAR; AQUATIC HABITAT APPEARS UNSUITABLE FOR CRLF  
& BREEDING; SMALL AMT. OF OVERHANGING BANK; NO DEEP  
POOLS.

UPLAND HABITAT ON SLOPES IS DENSE VINES + SHRUBS - ARR. WILLOW IN  
CREEK TRAIL. ~40-50% CANOPY COVER; SLOPES PROVIDE GOOD UPLAND  
HABITAT FOR CRLF.

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs SEE APP. 1 OF BIO. REPORT
6. Maps with important habitat features and species locations



(7)

Appendix E.  $\beta$   
California Red-legged Frog Survey Data Sheet

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: JAN 25, 2006 Survey Biologist: HUNT LAURENCE E.  
(mm/dd/yyyy) (Last name) (first name)

Survey Biologist: \_\_\_\_\_  
(Last name) (first name)

Site Location: SEE 11 JAN 06 SHEET  
(County, General location name, UTM Coordinates or Lat/Long, or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: AVENIDA DE LA LUP B.A.  
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING  
Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 1915 hrs End Time: 2030 hrs

Cloud cover: partly cloudy Precipitation: none

Air Temperature: 61°F Water Temperature: 62°F

Wind Speed: <5 mph Visibility Conditions: excellent

Moon phase: 30% Humidity: ?

Description of weather conditions: \_\_\_\_\_

Brand name and model of light used to conduct surveys: Wheat Lamp

Were binoculars used for the surveys (circle one)? YES NO

Brand, model, and power of binoculars: Nikon Restoration 8x40

(7a)

Appendix E.  $\beta$   
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
<u>Hyla regilla</u>	<u>8</u>	<u>7H, 2O</u>	<u>adult</u>	<u>adult</u>	<u>100%</u>

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons:

none observed

Other notes, observations, comments, etc.

see 11 Jan 06 sheet

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

(8)

Appendix E. 3  
California Red-legged Frog Survey Data Sheet

Survey results reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Survey: JAN 30 2006 Survey Biologist: HUNT LAWRENCE E.  
(mm/dd/yyyy) (last name) (first name)

Survey Biologist: \_\_\_\_\_  
(last name) (first name)

Site Location: SEE PREVIOUS SHEETS  
(County, General location name, UTM Coordinates or Lat/Long, or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

Proposed project name: AVENIDA DE LA LUZ B.A.  
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 1415 - 1830 hrs

End Time: 1615 hrs - 2030 hrs

Cloud cover: partly cloudy

Precipitation: none

Air Temperature: 67°F - 55°F

Water Temperature: 61°F

Wind Speed: 5-10 mph

Visibility Conditions: excellent

Moon phase: none

Humidity: ?

Description of weather conditions: \_\_\_\_\_

Brand name and model of light used to conduct surveys: WHEAT LAMP

Were binoculars used for the surveys (circle one)? YES NO

Brand, model, and power of binoculars: NIKON NATURALIST - 8x40

8A

Appendix E. 4  
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

	Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
DAY	<u>HYLA RESILIA</u>	<u>1</u>	<u>O</u>	<u>ADULT</u>	<u>ADULT</u>	<u>100%</u>
NIGHT	<u>HYLA RESILIA</u>	<u>10+</u>	<u>H</u>	<u>"</u>	<u>"</u>	<u>"</u>

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons:

RACCOON TRACKS

Other notes, observations, comments, etc.

SEE 11 JAN. NOTES

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations



**Appendix C. Existing Habitat Conditions on  
Proposed Building Site and  
Lighthouse Creek**



**Photo 1. Dense non-native and ornamental vegetation along upper portions of western slope of Lighthouse Creek invert, looking NE from building site. 8 February 2006.**



**Photo 2. Lighthouse Creek, looking south from footbridge at end of Camino de la Luz. Subject parcel is beyond deck at right of photograph. Note dense riparian vegetation along creek and extensive invasive, non-native and ornamental vegetation along slopes. 8 February 2006.**



Photo 3. Lighthouse Creek, looking upstream (north) from footbridge at end of Camino de la Luz. Note dense riparian and ornamental vegetation along creek. Eucalyptus trees on right side of photo in distance provide an autumnal roost for monarch butterflies (west side of La Mesa Park). 8 February 2006.



Photo 4. Small pool in Lighthouse Creek below footbridge at end of Camino de la Luz. Aquatic habitats such as this, together with dense fringing vegetation are preferred by California red-legged frogs. This type of aquatic habitat is rare in Lighthouse Creek. 8 February 2006.





16 March, 2005

City of Santa Barbara  
Community Development Department  
Planning Division  
ATTN:  
Renee Brooke, AICP  
Associate Planner

RE: Peer Review of Geologic Analysis for a Project at 1837 ½ El Camino de la Luz

Dear Ms Brooke,

Herewith is my review of the geologic investigations that have been conducted at the subject parcel (APN 45-100-65). Included as well is a report of my observations at the property and its vicinity based upon two site visits.

I have organized this report to review prior plans and studies chronologically and then present my findings and comments regarding the location of the verge of the bluff and a proper 75-year setback. Geologic impacts under CEQA will also be addressed. A list of the materials reviewed for this report is given in the Appendix.

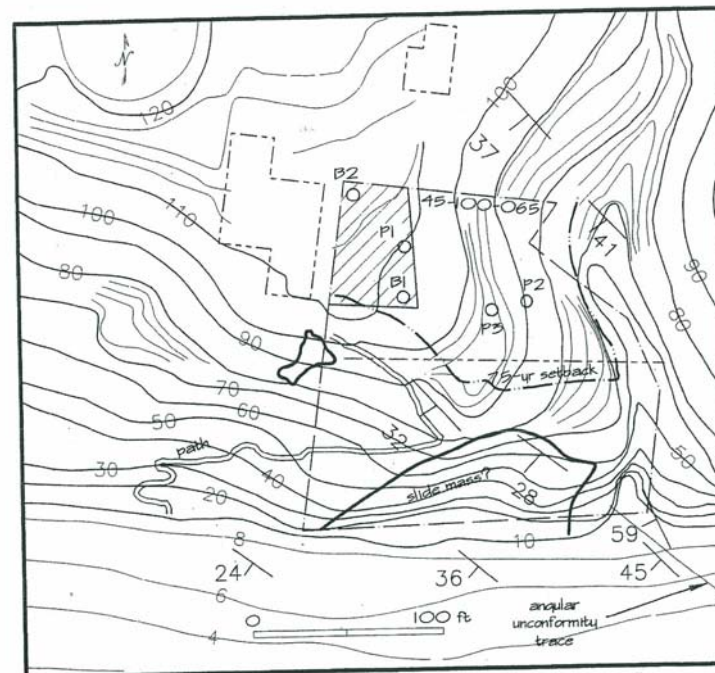
None of the large format geologic maps included with the reviewed reports were available for inspection. To correct this regrettable lapse, the reviewer has prepared a map (Figure 1) that combines the information gleaned from the text and sketches in the reviewed reports with his own observations and field measurements. The City of Santa Barbara topographic map of 1998 covering the area that includes the subject parcel was used as the base for the map.

**Buena Engineers 1971** This report discusses the findings of an engineering geological investigation of the subject parcel. Two borings to 14 ½ feet were drilled on the parking lot atop the bluff. Neither the geologic log from these borings nor the results of analyses of samples from the borings were provided with the report. Limited geological information, the location of the borings and several measurements of the attitude of the Monterey strata on and near the subject parcel, are included on the map in Figure 1. The stratigraphy and attitude data were verified by the writer in the field.

APN 45-100-65

MAP 3-1-2005

CITY OF SANTA BARBARA



**Figure 1. Geologic and topographic map of the subject site and vicinity. Information gleaned from the materials reviewed have been placed on this map. The map includes the reviewer's field observations as well. Buena Engineers soil borings are labeled B1 & B2. Pacific Geoscience borings are P1, P2 & P3.**

The Monterey strata are thin-bedded and are fractured into pieces a few inches on a side. These strata are exposed in the coastal bluff face and in the banks of the ravine that extends along the east boundary of the subject parcel. The coastal bluff is reported to have an inclination of as much as 57° in this report. The writer found such slopes in the upper part of the bluff, but inclinations of 77° were measured at the lower section of the bluff.

Three samples of the materials encountered in the two drill holes were analyzed for maximum density – optimum moisture, direct shear, and expansiveness. Based upon some or all of these analyses the soils on the subject parcel were found to be moderately expansive and subject to some settlement. Recommendation for foundation design were provided.



**Pacific Materials Laboratory 1978** Following the Camino de la Luz landslide of February 14 1978, this report was commissioned by the City of Santa Barbara. Pacific Materials Laboratory, Inc engaged Dr. Donald Weaver to conduct a geological investigation and prepare this report. The purpose of the investigation was to determine the conditions causing the slide and to identify mitigation of the slide hazard in the vicinity. The location of the slide in relation to the subject parcel is shown by the topographic map in Figure 2.

The stratigraphy, structural geology, physiography and sea cliff retreat were considered. It was determined that the probable cause of the slide was the seaward dip of the Monterey strata and the lack of proper control of surface water that was allowed to permeate the strata. The added mass of the water and the lubrication it provided caused the shear strength of the weakest stratum to be exceeded to the point of failure.

The nature of the slide was thought to be translational along a bedding plane with some rotational movement at the toe (Dr. Donald Weaver, personal communication). The large extent of the slide and the geometry of the slide mass indicates that the upper part of the slide was an active block of strata that failed along a bedding plane and the lower part of the slide was a passive block of strata that was compressed, forced outward and upward (as much as 10 feet). The proximity of the slide requires that the subject parcel be examined to determine if the conditions fostering this kind of slide exist there as well.

The direction of movement of the slide was not directly down dip. Rather, the movement was from 15° to 28° eastward of the dip azimuth. This is significant in that the dips at the subject parcel are parallel to those at the slide. The apparent dip in the direction of slide movement was between 27° and 29°. This is taken into account in examining the stability of the slopes at the subject parcel.

**Smith 1980** This geologist reviewed the Buena Engineers 1971 report and decided that the parking lot area is underlain by 6 feet or 8 feet of Older Alluvium which lies unconformably on truncated, inclined Monterey strata. He stated that the previous findings did not apply to the area he considered to be buildable. The use of continuous footings was regarded as inappropriate in the parking lot area.

Smith took issue with the Preliminary Setback Line presented in the Santa Barbara County Seismic Safety Element. A consideration of the actual measured rate of beach erosion at the subject parcel led him to conclude that unrealistic erosion rates were used in placing the line in the vicinity of the subject parcel.

He reviewed the Weaver report and agreed with the findings, adding that shattering of the Monterey strata involved in the slide might have been caused by movement on the La Vigia fault which trends E-W about a half-mile to one mile north of the subject parcel. He stated that the dip of the strata was nearly parallel to the trend of the coastal bluff at the slide site, but that the dip of the strata at the subject site was more nearly perpendicular to the trend of the bluff. He based his choice of a building site on the

unlikelihood of a major slide at the subject parcel upon this premise. This is true of attitudes of strata near the mouth of the ravine along the eastern boundary and east of this point, but west of the ravine mouth the attitudes of the strata are more closely parallel to the shoreline.

The Camino de la Luz slide is reported to extend eastward to the southwest corner of the subject parcel (Figure 2). Smith states that similar sliding is not likely on the subject parcel because of the attitude of the strata and the its resistance to erosion. Dr. Smith explains the minimal influence of the Camino de la Luz slide to the subject parcel by asserting that the slide involved rocks weaker than at the subject parcel and by suggesting that no slides have disturbed the strata at the subject parcel.

Smith's report states that because the soils at the subject parcel are expansive and 8 feet to 10 feet thick, a building should be constructed on a foundation of caissons rather than on continuous footings. Soil creep is also a matter of concern on the steep slopes of the area Smith considers a building envelope. The reviewer observed tension cracks over an inch thick associated with soil creep at the SE corner of the paved area.

The building envelope chosen by Smith is just east of the paved area (cross-hatched on Figure 1). He declared that the paved area was unsuitable as a building site because of an open bedding plane fissure that he observed from the beach and which he projected northward. His buildable envelope lies east of the fissure where the bedrock was found by Dr. Smith to be "extremely competent and of high strength", although data supporting this assertion was not given in his report. He mentions that the rocks in the SE corner of the subject parcel below a flat excavated area just SE of the paved area have been affected by landslides.

**Dibblee 1986** This brief report deals with general aspects of the topography and geology of the subject parcel. It considers sea cliff erosion, landslide hazards, and earthquake hazards in general terms. No consideration of building sites or engineering geology of the subject parcel are included. There is nothing with which to take exception.

**Pacific Geoscience 1987** This report covers the soils investigation of the building envelope recommended by Dr. Smith. Three borings were made; their locations are shown on Figure 1. The boring on the paved area reached refusal at 13 feet depth. The other two borings drilled on the slope east of the paved area reached refusal at 6 feet depth.

The logs of the borings give only a terse description of the materials encountered. The borings encountered a sandy clay soil overlying weathered Monterey shale that graded downward into fresh shale. Apparently no soils analyses were conducted on samples of these materials. A cast-in-place pile foundation was recommended for any structure built in the tested area. A warning was given regarding soil creep on the sloping part of the building envelope.



**K-C Geotechnical 1987** This two page letter amplified the findings of Mr. Dibblee. The rate of cliff retreat was given as 6 inches per year to 8 inches per year. It was stated that conditions that produced the Camino de la Luz slide do not exist at the subject parcel and the likelihood of a slide are "extremely remote". No slumping, adverse erosion or sliding was found on the west slope of the ravine that extends along the east boundary of the subject parcel.

**Norris 1988** Dr. Norris estimates a rate of cliff retreat of 4 inches per year based upon a study of three aerial photographs taken in 1943, 1954 and 1986. This low rate is consonant with the assertion Dr. Smith made that the erosion rate in the vicinity of the subject parcel is slower than at areas to the east and west.

Dr. Norris discussed how erosion of the cliff face by ocean waves at high tides causes episodic quantum failure of strata weakened by weathering in the cliff face. The result is the maintenance of the steep cliff face at the subject parcel. Dr. Norris found little chance of the subject parcel being affected by a landslide except at its extreme SE corner of because of the attitude of the Monterey strata.

Dr. Norris did not discuss the relative merits of building envelopes proposed in the past. Rather, he listed suggestions regarding the discharge of surface water and appropriate landscaping vegetation.

**Pacific Geoscience 1989** This letter reports observations of the subject parcel to review a plan prepared for a site on the subject parcel. No substantial changes since 1987 were observed. A drilled caisson foundation was stated as being the preferred for construction on the site (assumed to be in the building envelope proposed by Dr. Smith).

**Pacific Geoscience 1991 (1)** Another site visit to assess changes at the proposed building site is reported. Conditions were as described in the 1989 letter.

**Pacific Geoscience 1991 (2)** This letter is an addendum to the previous 1991 letter. This letter discusses the placement of a garage on the west side of the open bedding plane fissure reported by Dr. Smith. Heavy vegetation prevented the reviewer from examining the ground surface for evidence of this fissure.

**Smith 1991** He discusses the availability of historical aerial photographs of the subject parcel and surrounding area. They are available in the UCSB library.

**Earth Systems Consultants 1996** This letter by the successor company of Pacific Geoscience, Inc. recapitulates the correspondence discussed above in this report. Soil slumping at the upper part of the bluff located just seaward of the paved area and erosion at the mouth of the ravine east of the subject parcel were reported following a site visit in January. The choice of drilled caissons for foundations of the house and garage was reiterated.

**CFG Consultants 1996 (1)** This is an interoffice memo from James Fisher to Richard Cousineau, both of CFG Consultants, presenting a critique of the work of Dr. Smith that is cited above. Not all of this copy of the memo is legible. It deems Smith's work as inaccurate and states that the base topographic map Smith used is inaccurate. In comparing Smith's geologic mapping to work done in 1978, Fisher finds the City Geologic Hazard map (Hoover 1978) to be the accurate one.

Of particular importance is the fact that the attitude of the strata at the southeastern corner of the subject parcel given by Smith is not correct. I made the same observation when I measured the strike and dips of Monterey strata exposed at low tide in the wave cut platform fronting the subject parcel. The beach had been stripped of sand by several intervals of wave attack from the SE so there could be no uncertainty regarding the relationship of the strike of the strata to the trend of the cliff. Along the entire length of the subject parcel's beachfront the strike of the strata was more nearly parallel the shore than perpendicular to it.

Smith's description of the Monterey strata as being siliceous and therefore resistant to erosion is contended by Fisher. I found that the shale is more like a marl and I agree with Fisher's observation that only a few siliceous bed are present and they do not influence the character of the bulk of the strata exposed in the sea cliff.

Fisher takes issue with several other of Smith's findings. He takes exception with the lack of proper identification of earth materials on the subject parcel, the light treatment of slope stability, the misidentification of the "open bedding plane fracture", which is actually a 1 inch thick asphaltum bed, and dismissal of the matter of daylighted strata at the SW part of the subject parcel. I am in agreement with Fisher in these instances.

**CFG Consultants 1996 (2)** This report is the result of an engineering geology study of the subject parcel with respect to development plans prepared by Martin Northart and Spencer, Inc. and an architect, Detlev Peikert. The study was to evaluate geologic hazards that might affect the structures to be built in the building envelope in the northeastern part of the subject parcel.

The drainage on the subject parcel and surrounding parcels directs runoff across the parcel and thence to the creek on the east boundary of the parcel. A graded pad at the terrace that exists just SW of the paved area is shown in a 1954 aerial photograph. No mention is made of what the topography was before the excavation of the pad there.

The sea cliff at the south side of the subject parcel is described as having a compound slope that is generally convex upward. The base of the cliff slopes 60° to 80°. Above the reach of the waves the slope is 40° and at the top of cliff the slope about 28°.

The geology of the subject parcel is described as a terrace sand lying upon shale bedrock. The sand is said to underlie the paved area and is 5 feet to 6 feet thick. Fill occurs at the graded pad. The shale bedrock dips 25° to 50° to the southwest and is folded to a minor degree in places. Small scale tectonic features such as overriding strata, or small



interformational thrust faults are reported. An angular unconformity at the mouth of the ravine in the SW corner of the subject parcel is reported. This feature separates the steep dipping strata on the east from the more gently dipping strata at the beachfront of the subject parcel on the west. The reviewer verified the existence of these features in the field.

The report describes the seismicity of the subject parcel as likely to cause low level damage to single family dwellings. The closest potentially active fault is the Mesa fault which lies about 1 ½ miles N of the parcel. Active to potentially active faults in the Santa Barbara Channel are mentioned.

The rate of retreat of the sea cliff is chosen to be 4 inches per year. However the erosion at the top of the concave-upward slope is deemed to be negligible over the 65 years (actually 67 years) elapsed between the dates of the aerial photography that CFG examined. Erosion by runoff from the concrete-lined swale and failure of a sections of sea cliff by slumping are indicative of the variability of erosion that can occur.

Landslides involving the cliff are reported to have occurred in the 1970s at the subject site. Soil slumps have occurred near the verge of the cliff. The scarp left by one of these slumps is still visible just below the base of the wooden stairs leading to the concrete-lined swale at the upper part of the sea cliff.

Soil creep and flooding are mentioned in the report; both are considered minor at the subject parcel. The use of caissons set into the shale bedrock and gutters on buildings are recommended to avoid the effects of these processes.

**Fisher 2001** This report states that conditions at the subject site are little changed from what was observed in 1996. The California Coastal Commission definition of the "Bluff Edge" is presented and its location noted on an accompanying sketch map. The line demarcating the 75-year setback from the bluff edge is shown on Figure 1.

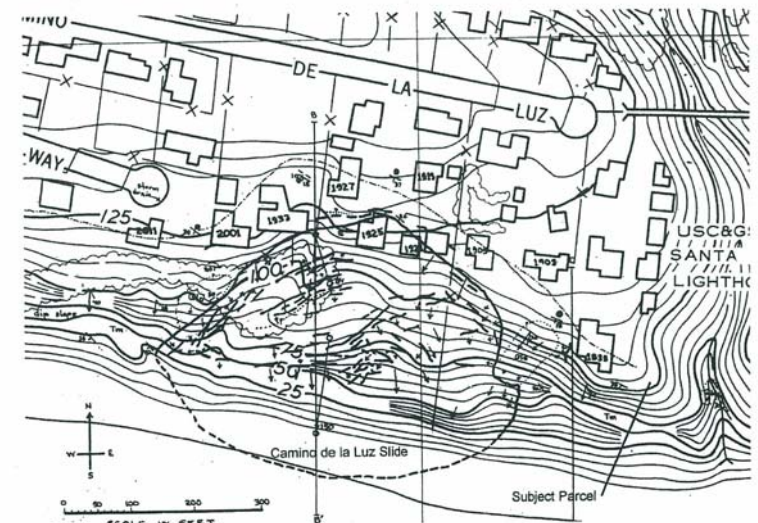
A study of historical aerial photographs produced estimates of the time of developments on and adjacent to the subject parcel. The neighboring houses and the cabaña on the graded pad appear to have been constructed during the 1940s to 1960s. The cabaña was gone by 1975.

The rate of cliff retreat was stated to be 4 inches per year and a 75-year setback of 25 feet was recommended for the subject parcel.

**Fisher 2002 (1)** This letter presents responses to comments in letters sent by neighbors of the subject parcel. Little salient material was offered save the mention of a landslide at 1839 Camino de la Luz in November 1995. This slide did not alter the form of the upper edge of the cliff. Slide activity was noted at the SW corner of the subject parcel. The reviewer confirms this occurrence.

**Fisher 2002 (2)** This letter address comments by the City Review Team, specifically the importance of controlling surface runoff, the definitions of the "bluff edge" used by Fisher and CFG, and the way the 75-year setback was determined.

**The Reviewer's Comments** The pertinent issues to be considered in assessing a proposed construction at the subject parcel are slope stability and drainage. Given the size and proximity of the Camino de la Luz slide (see Figure 2) and the evidence of sliding on the subject parcel, there is an unfulfilled need for a better evaluation of the stability of the slopes at the parcel. Smith addressed this issue anecdotally and Fisher pointed out a need for further analysis of slope stability. CFG noted the existence of landslides on the parcel but did not mention that this implied further investigation of slope stability. The reviewer has therefore conducted a slope stability analysis which is discussed in detail in a subsequent section of this report.



**Figure 2. The proximity of the subject parcel to the Camino de la Luz slide.**  
from Weaver 1978.

All the geologists who wrote reports reviewed here declared the need for controlled drainage on this cliff-top parcel. The reviewer agrees and would insist that this be considered thoroughly by engineers, architects and landscape architects involved in planning the development of the subject parcel. Surface water reaching the subject parcel must be intercepted as soon as possible and conducted under controlled conditions to either the ravine east of the parcel or the beach. Under no circumstances should rainwater be allowed to accumulate and flow down the coastal cliff at the south side of the subject parcel.



Other issues, such as the details of the geology and physiography of the subject parcel have been treated adequately by Fisher and CGS. The reviewer found evidence to corroborate their findings in his field investigation of the parcel and its vicinity.

**75-year Setback** The reviewer finds that the rate of sea cliff retreat is conservatively taken to be 4 inches per year. Beach erosion over the next 75 years would be expected to amount to 25 feet of retreat. This number does not take into account the reduction in retreat rate that must occur as continued retreat lengthens the wave-cut platform fronting the sea cliff. Assuming that the wave climate remains the same, the constant average wave energy flux must be distributed over an increasing length of platform. This would cause an exponential decay in the wave erosion rate.

The retreat of the sea cliff would displace the existing cliff profile landward modified by the increase in the ratio between the degree of terrestrial erosion affecting the part of the coastal cliff above the reach of wave attack and the degree of wave erosion at the toe of the cliff. The net effect should be a reduction in the slope at the upper part of the cliff as terrestrial erosion (mainly by rain runoff) begins to predominate.

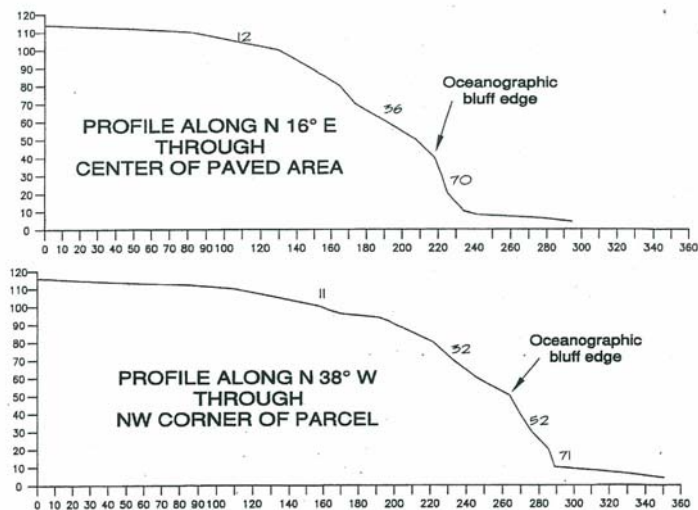


Figure 3. Topographic profiles through the subject parcel. The numbers indicate the local slope in degrees. Note the rounded, convex-upward shape of the area above the sea cliff in both profiles.

Significant to the consideration of a proper setback, the "bluff edge" which should mark the elevation above which terrestrial erosion prevails would move lower on the cliff face as time progresses. Of course this assumes that no human intervention takes place. But the control of runoff is a condition of mitigation of the impact of rain runoff and this would tend to maintain the status quo or even cause wave erosion to become dominant at the toe of the cliff with an increase in the elevation of the "bluff edge".

However, the California Coastal Commission's somewhat arbitrary definition of the "bluff edge" is based upon a perceived static geometry rather than upon actual coastal processes, so the setback given by Fisher (Figure 1) should serve the purpose of the Planning Division of the Department of Community Development of the City of Santa Barbara. Fisher's setback is 25 feet from the "landward edge of the topmost riser" at the graded pad SE of the paved area (despite the fact that the "riser" is completely artificial), so it complies with the California Coastal Commission's definition and it is based upon 75 years of bluff erosion at 4 inches per year.

Typical cross sections of the subject parcel are shown in Figure 3. This figure shows the configuration of the sea cliff and top area of the parcel. The slope angles at several distinct segments of the profile are shown. A reasonable "bluff edge" is indicated on the profile. The 75-year setback from the "bluff edge" as stipulated by the California Coastal Commission is indicated on Figure 1.

**Slope Stability Analysis** The field observations made by the reviewer led to a conclusion that the SE corner of the subject parcel had suffered a significant landslide in the past. The topographic expression of this feature reinforced this conclusion. The trace of the failure plane of this and possibly another slide are shown on the map in Figure 1.

It is with misgivings that the reviewer notes that several of the papers reviewed here mentioned that sliding occurred here, but no one seemed concerned that this meant that the Monterey strata failed not down the dip as at the Camino de la Luz slide, but rather nearly normal to the dip. This implies that the shear strength of the strata in its present condition can be exceeded given the appropriate stress conditions and that it might be misleading to focus upon down-dip sliding as the only way slope failure can occur here.

The bedrock mass between the E edge of the Camino de la Luz slide and the ravine on the west of the subject parcel is of concern because it lacks lateral support. Many of the slides the reviewer has examined had declivities on one or both sides of the failed mass. It appears that the stability of a slope depends to some extent upon the shear strength of lateral attachment as well as the attachment below and up-slope.

In an endeavor to examine all possible geological hazards at the subject parcel, it was decided to perform an analysis of the stability of the eastern and southern slopes of the subject parcel. It is anticipated that such analyses would be prudent given that the latest designated buildable envelope lies on the upper part of the slope involved in the aforementioned slide.

Slope stability calculations were performed on the topographic profile shown in Figure 3 using the Modified Bishop method. This method calculates the factor of safety of each of an array of slip circles that is feasible given the geometry of the slope. A pseudostatic (seismic) coefficient of 0.50 was used to ensure obtaining a conservative estimate of the slope stability for each slip circle. The calculations were performed using a unit wet weight of 120 lb/cu ft, cohesion = 0 lb/sq ft, and internal friction angles of 14°. These calculations explored the residual (minimal) strength of the slope.

The strength parameters of the Monterey shale were estimated using the Hoek-Brown (2002) failure criterion. The cohesion and angle of internal friction for clay shale are 0.663 MPa and 14.25°, respectively. These strength parameter values applicable to the Monterey shale. A value of cohesion of 0.0 psf/sq ft is used to estimate the residual strength of the Monterey shale assuming that ancient slides have reduced the strength of the rock mass. The cohesion value obtained by the Hoek-Brown (2002) criterion is more representative of the peak strength of the Monterey shale.

The unit wet weight of the Monterey shale was taken to be 120 lb/cu ft. This is approximately the same value obtained for Rincon shale in the Summerland region (121-122 lb/cu ft). A value of the unit wet weight of 95 lb/cu ft has been measured elsewhere, however the larger value is used for the sake of conservatism.

The Mohr-Coulomb strength criterion can be manipulated to show that at failure (factor of safety = 1 and cohesion = 0) the angle of internal friction is equal to the angle of the slope of the slide plane. The angle of the slope near the mouth of the ravine at the E side of the subject parcel is approximately 32° to 52°. Use of this angle with cohesion set to zero allows determination of the residual, or post-failure, strength of the Monterey strata forming the east slope of the subject parcel. An analysis indicated that the residual strength of the Monterey strata at the subject parcel is quite low. The calculated factor of safety is 0.01.

Another calculation was performed using a unit wet weight of 120 lb/cu ft, cohesion = 12590 lb/sq ft (0.663 Mpa) and an internal friction angle of 14°. These Hoek-Brown values were taken to represent the peak (maximal) strength of a slope in undisturbed rock. The factor of safety for peak strength conditions exceeds 6.0 for all the slip circles tested.

The Modified Bishop method calculates the factor of safety of each of an array of slip circles that is feasible given the geometry of the slope. A pseudostatic (seismic) coefficient of 0.50 was used to ensure obtaining a conservative estimate of the slope stability for each slip circle. Residual strength calculation indicates that the brow of the sea cliff at the bluff edge is prone to fail in Monterey shale masses that have failed in the past. Unaffected rock on the brow is stable with a factor of safety exceeding 6.0 or more.

Another stability analysis using the Modified Bishop method with a pseudostatic (seismic) factor of 0.50 was performed to examine the effect of deep slip surfaces. The factor of safety for such a failure is in excess of 1.5. This kind of analysis is representative of the Camino de Luz slide mechanism.

The possibility of a plane failure down dip was investigated using a program by Dr. E. Bane Kroeger of the University of Alaska. Peak strength with a factor of safety of 6.7 indicates that slopes in unfailed Monterey shale are quite stable. The residual strength of failed masses is 0.47. Landslide blocks are such masses; they are not stable and further movement in those masses can be expected.

The results of these analyses are given in the appendix at the end of this report. The results indicate that the entire slope of undisturbed Monterey shale is stable under conditions of a severe earthquake. It is necessary to point out that no residential construction should be considered for the SE corner of the subject parcel because of the likelihood that it is a landslide block of minimal strength.

One must conclude that, on the scale of the immediate area of the subject parcel, the slope is stable. At a small scale, such as at the toe of the sea cliff stability or on a scale the size of the Camino de la Luz slide and at a different (longer) time scale the stability of the strata might be less, but it is beyond the capability of method of analysis to determine this.

I hope that this review is suitable for your purposes. If you have any questions or comments, please contact me.

Sincerely,



William Anikouchine PhD  
California Certified Engineering Geologist EG 1584



## APPENDIX

### List of Reports Reviewed in this Document (in chronological order)

**Buena Engineers 1971** – “Preliminary Soil Investigation and Engineering Geology Report for a Single-Family Residence on El Camino de la Luz in the La Mesa Area Santa Barbara, California” Buena Engineers 17 May 1971.

**Pacific Materials Laboratory 1978** – “Preliminary Landslide Investigation, Sea Cliff Property, El Camino de la Luz, Santa Barbara, California” for City of Santa Barbara” by D. W. Weaver & D. F. Hoffman for Pacific Materials Laboratory 6 March 1978.

**Smith 1980** - “Feasibility of Site Development 1837 ½ El Camino de la Luz” by R. J. Smith 29 October 1980.

**Dibblee 1986** – “Geologist Report, 1837 El Camino de la Luz, Santa Barbara, California” by Thomas W. Dibblee 24 June 1986.

**Pacific Geoscience 1987** – “Soils Engineering Investigation of 1857 el Camino de la Luz, Santa Barbara, California” Pacific Geoscience, Inc 9 April 1987.

**K-C Geotechnical 1987** – Letter to Mr. Bruce Peterson from Richard Cousineau K-C Geotechnical Associates 3 July 1987.

**Norris 1988** – Untitled report by R. M. Norris 8 November 1988.

**Pacific Geoscience 1989** – Letter titled “Review of Site Location at 1857 (sic) El camino de la Luz, Santa Barbara, California” by J.M. Sims 18 March 1989.

**Pacific Geoscience 1991 (1)** – Letter titled “Second Review of Site, 1837 ½ El Camino de la Luz, Santa Barbara, California” by J. M. Sims 21 January 1991.

**Pacific Geoscience 1991 (2)** – Letter titled “Review of Garage Site, 1837 ½ El Camino de la Luz, Santa Barbara, California” by J. M. Sims 5 February 1991.

**Smith 1991** – Untitled letter by R. J. Smith 18 March 1991.

**Earth Systems 1996** – Letter titled “1837 ½ el Camino de la Luz, Santa Barbara, California, Third Review of Site” by J. M. Sims, Earth System Consultants 2 February 1996.

**Fisher 1996** – Interoffice memo from J. Fisher to R. P. Cousineau titled “Background Review of Dr. Barthel’s File: Previous Reports” CFG Consultants 28 May 1996.

**CFG 1996** – “Proposed Building Site 1837 ½ El Camino de la Luz, Santa Barbara, California” CFG Consultants 19 June 1996.

**Fisher 2001** – Letter titled “Engineering Geologic Update Report, 1837 ½ El Camino de la Luz, Santa Barbara” Fisher Geologic 2 December 2001.

**Fisher 2002 (1)** – Letter titled “Geologic Review of Supplemental Information, 1837 ½ El Camino de la Luz, Santa Barbara” 15 July 2002.

**Fisher 2002 (2)** – Letter titled “Geologic Response to City Review Team Comments, 1837 ½ El Camino de la Luz, Santa Barbara” 16 December 2002.

### Slope Stability Analyses Results

#### Plane Failure

Residual Strength: Slope Height – 100 feet  
Slope face angle - 70°  
Upper slope angle - 12°  
Cohesion – 0 psf  
Friction angle - 14°  
Dip of discontinuity - 28°  
Unit weight of rock – 120 pcf  
Unit weight of water – 61.4 pcf  
Bluff edge location – 36.4 feet  
Length of discontinuity – 327.4 feet

Factor of Safety – 0.469

Peak Strength: Slope Height – 100 feet  
Slope face angle - 70°  
Upper slope angle - 12°  
Cohesion – 12590 psf  
Friction angle - 14°  
Dip of discontinuity - 28°  
Unit weight of rock – 120 pcf  
Unit weight of water – 61.4 pcf  
Bluff edge location – 36.4 feet  
Length of discontinuity – 327.4 feet

Factor of Safety – 6.7

# Stability Analysis using Psuedostatic Assumption for Seismic Effects

Psuedostatic Factor = 0.5

## SLOPE STABILITY ANALYSIS USING SIMPLIFIED BISHOP METHOD

1837 1/2 Camino de la Luz

03-30-2005 1:51:45 PM

'QKBASIC\BISHOP.BAS'

Layer 1 Cohesion, kips/sqft 12.59  
 Layer 1 Unit Weight, kips/cuft .12  
 Layer 1 Friction Angle, deg. 14.25  
 Layer 2 Cohesion, kips/sqft 9999  
 Layer 2 Unit Weight, kips/cuft .13  
 Layer 2 Friction Angle, deg. 0

THIS ANALYSIS WAS MADE USING SLOPING WATER TABLE CONDITIONS WITH SERPAGE

COORDINATES OF THE CENTER OF THE CIRCLE & THE CIRCLE RADIUS				SAFETY FACTOR FS	AREA OF FAILURE (SQ FT)	COORDINATES OF INTERSECTION OF THE FAILURE CIRCLE WITH GROUND LINE			
X (FT)	Y (FT)	R (FT)				X UP	Y UP	X DOWN	Y DOWN
340	160	330	1.65	141.8	14.7	215.2	633.1	8.3	
340	160	340	1.96	151.3	4.6	215.8	644.0	7.8	
350	160	330	1.66	139.8	24.6	214.7	642.8	7.9	
350	160	340	1.98	149.3	14.5	215.2	653.8	7.3	
350	160	350	1.94	159.1	4.5	215.8	664.7	6.8	
360	160	330	1.68	137.7	34.5	214.1	652.6	7.4	
360	160	340	2.00	147.2	24.4	214.7	663.5	6.8	
360	160	350	1.96	157.0	14.4	215.2	674.4	6.3	
360	160	360	1.92	167.2	4.3	215.8	685.3	5.7	
340	150	330	1.71	147.8	16.5	215.1	637.9	8.1	
340	150	340	1.68	157.6	6.4	215.7	648.7	7.6	
350	150	330	1.73	145.8	26.4	214.6	647.7	7.6	
350	150	340	1.70	155.5	16.3	215.1	658.5	7.1	
350	150	350	1.67	165.5	6.2	215.7	669.2	6.5	
360	150	330	1.75	143.7	36.3	214.0	657.5	7.1	
360	150	340	1.71	153.4	26.2	214.6	668.3	6.6	
360	150	350	1.68	163.4	16.1	215.1	679.0	6.0	
360	150	360	1.65	173.8	6.0	215.7	689.7	5.5	
340	140	330	1.81	153.7	18.6	215.0	642.4	7.9	
340	140	340	1.80	163.7	8.5	215.5	653.1	7.3	
350	140	330	1.84	151.7	28.5	214.5	652.2	7.4	
350	140	340	1.82	161.6	18.4	215.0	662.8	6.9	
350	140	350	1.81	171.9	8.3	215.6	673.5	6.3	
360	140	330	1.86	149.6	38.4	213.9	662.0	6.9	
360	140	340	1.85	159.5	28.3	214.5	672.6	6.4	
360	140	350	1.83	169.8	18.1	215.0	683.3	5.8	
360	140	360	1.81	180.3	8.0	215.6	693.9	5.3	
340	130	330	1.83	159.6	21.1	214.9	646.5	7.7	
340	130	340	1.52	169.7	10.9	215.4	657.0	7.1	
340	130	350	1.51	180.2	0.7	216.0	667.5	6.6	
350	130	330	1.54	157.5	31.0	214.3	656.3	7.2	
350	130	340	1.53	167.7	20.8	214.9	666.8	6.7	
350	130	350	1.52	178.2	10.6	215.4	677.3	6.1	
350	130	360	1.51	188.9	0.4	216.0	687.8	5.6	
360	130	330	1.56	155.5	40.8	213.8	666.1	6.7	
360	130	340	1.55	165.6	30.6	214.4	676.6	6.2	
360	130	350	1.54	176.1	20.5	214.9	687.2	5.6	
360	130	360	1.53	186.8	10.3	215.4	697.6	5.1	



## City of Santa Barbara Planning Division

I CERTIFY THAT THIS NOTICE WAS  
 MAILED ON 08/31/05  
 TO THE ADDRESSES ON THE  
 ATTACHED MAILING LABELS  
Joeyne S.

### NOTICE OF EIR PREPARATION/NOTICE OF ENVIRONMENTAL SCOPING HEARING

Date: August 31, 2005

To: State Clearinghouse  
 City Clerk  
 Clerk of the Board  
 Neighbors and Interested Parties

From: Planning Division  
 City of Santa Barbara  
 P.O. Box 1990  
 Santa Barbara, CA 93102-1990  
 (805) 564-5470

**Project Title:** 1837 1/2 El Camino de la Luz Residence  
**Project Location:** The project site is located at 1837 1/2 El Camino de la Luz, between Oliver Road and Meigs Road, in the West Mesa neighborhood of the City of Santa Barbara, Santa Barbara County.  
**Project No.:** MST2002-00214  
**APN:** 045-100-065  
**General Plan:** Residential, 5 units per acre  
**Zone:** E-3/One-Family Residence and SD-3/Coastal Overlay  
**Public Scoping Hearing:** Thursday, September 22, 2005, City Council Chambers, Santa Barbara City Hall, De La Guerra Plaza, 735 Anacapa Street.

**Project Description:** The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz).

The City of Santa Barbara will be the Lead Agency and will prepare an environmental impact report (EIR) to evaluate impacts of the proposed 1837 1/2 El Camino de la Luz Residence. The purpose of an EIR is to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. The EIR would identify potentially significant effects, and any feasible means of avoiding or reducing the effects through project redesign, the imposition of mitigation measures, or implementation of alternatives to the project.

Comments on the proposed EIR scope of analysis are invited from public agencies, community interest groups, and individual members of the public. We request the views of public agencies as to the scope and content of environmental information germane to agency statutory responsibilities for the project. Some agencies may need to use the EIR prepared by our agency when considering approvals for the project. Please provide the name of an agency contact persons, if applicable.

**EIR Scope of Analysis:** The proposed EIR scope of analysis would include evaluation of project environmental effects associated with visual aesthetics impacts. An Initial Study, describing potentially significant visual aesthetic impacts as well as less than significant impacts in other issue areas, is available for review at the City Planning Division located at 630 Garden Street, or online at [www.SantaBarbaraCA.gov](http://www.SantaBarbaraCA.gov).

**Comments:** Written comments on the EIR scope of analysis identified in the Initial Study should be sent at the earliest possible date, but received not later than, October 3, 2005, at 4:30 p.m. Please send your written comments to the attention of Rence Brooke, AICP, Project Planner, at the above address.



**Public Hearing:** An environmental scoping hearing to receive public comments on the proposed EIR scope of analysis will be held before the Planning Commission on **Thursday, September 22, 2005**. The Commission meeting begins at 1:00 p.m. in City Council Chambers, Santa Barbara City Hall, De La Guerra Plaza, 735 Anacapa Street, and this meeting will have several items, including this hearing. An agenda with the order of items to be heard and staff report with an Initial Study for this hearing will be available on Friday, September 16, 2005, from the Planning Division or online at [www.SantaBarbaraCa.gov](http://www.SantaBarbaraCa.gov). Under *Quick Selections*, scroll to the heading *City Hall* and click on *Planning Commission*. Please note that online staff reports do not include some exhibits. In accordance with American Disabilities Act requirements, if you need assistance to attend the hearing, please contact the Planning Commission Secretary at 564-5470 several days in advance of the meeting to make arrangements.

Signature: Renee Brooke

Renee Brooke, Project Planner

Telephone: (805) 564-5470



## City of Santa Barbara Planning Division

### PLANNING COMMISSION MINUTES

September 22, 2005

#### CALL TO ORDER:

Vice-Chair John Jostes called the meeting to order at 1:04 p.m.

#### ROLL CALL:

##### Present:

Vice-Chair John Jostes  
Commissioners, Charmaine Jacobs, Stella Larson, Bill Mahan, George C. Myers and Harwood A. White, Jr.

##### Absent:

Chair Jonathan Maguire

#### STAFF PRESENT:

Jan Hubbell, Senior Planner  
Renee Brooke, Project Planner  
Victoria Greene, Project Planner  
N. Scott Vincent, Assistant City Attorney  
Deborah J. Bush, Acting Planning Commission Secretary

#### ENVIRONMENTAL HEARING:

#### APPROXIMATE TIME: 1:07 P.M.

#### APPLICATION OF BRENT DANIELS, AGENT FOR HERBERT BARTHELS, TRUSTEE, OWNER, 1837 1/2 EL CAMINO DE LA LUZ, 045-100-065 E-3/ONE-FAMILY RESIDENCE AND SD-3/COASTAL OVERLAY, GENERAL PLAN DESIGNATION RESIDENTIAL, 5 UNITS PER ACRE, MST2002-00214

**Project Description:** The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz).

The City of Santa Barbara will be the Lead Agency and will prepare an environmental impact report (EIR) to evaluate impacts of the proposed 1837 1/2 El Camino de la Luz Residence. The purpose of an EIR is to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. The EIR would identify potentially significant effects, and any feasible means of avoiding or reducing the effects through

project redesign, the imposition of mitigation measures, or implementation of alternatives to the project.

Comments on the proposed EIR scope of analysis are invited from public agencies, community interest groups, and individual members of the public. We request the views of public agencies as to the scope and content of environmental information germane to agency statutory responsibilities for the project. Some agencies may need to use the EIR prepared by our agency when considering approvals for the project. Please provide the name of an agency contact persons, if applicable.

**EIR Scope of Analysis:** The proposed EIR scope of analysis would include evaluation of project environmental effects associated with visual aesthetics impacts. An Initial Study, describing potentially significant visual aesthetic impacts as well as less than significant impacts in other issue areas, is available for review at the City Planning Division located at 630 Garden Street, or online at [www.SantaBarbaraCA.gov](http://www.SantaBarbaraCA.gov).

**Comments:** Written comments on the EIR scope of analysis identified in the Initial Study should be sent at the earliest possible date, but **received not later than, October 3, 2005, at 4:30 p.m.** Please send your written comments to the attention of Renee Brooke, AICP, Project Planner, at the above address.

Renee Brooke, Project Planner, provided an overview of the project and stated the purpose of the hearing.

Brent Daniels, Agent for Herbert Barthels, commented briefly on the project and thanked Staff for their continued efforts.

Public comment opened at 1:21p.m.

Commissioner questions:

1. Asked if views from the Coast Guard property should be included in the analysis.
2. When impacts cannot be mitigated, how can the Commission balance issues?

Public comment opened at 1:21p.m.

The following people commented on the scope of the EIR:

Stan Krome, stated that the project since the onset has been plagued by problems. Mr. Krome believes the lot is an illegal lot and would like the Commissioners to view the site.

JoAnna Morgan stated that she concurs with Mr. Krome. Ms. Morgan is concerned that only the issue of view is being considered in the EIR.

Public comment closed at 1:25p.m.

During the discussion, the Commissioners either individually or collectively with regards to the scope of the EIR:

1. Asked how the framing of alternatives would be addressed in the EIR.
2. Asked, if EIR focuses on view corridor, how does the EIR consultant determine what is being taken away and what will remain?
3. Asked when a public view would be considered permanently impacted
4. Stated that the geological review is defensible and is comfortable with the analysis of that issue in the Initial Study.
5. Suggested that the project architect prepare massing studies, starting with the smallest, legally allowable residence on the property.
6. Stated that oftentimes with EIRs, alternatives considered are not feasible. Would like to see the architect and owner propose feasible alternatives which would reduce the visibility of the home. Would like to see how the various scenarios will impact the view corridor, so the EIR should focus more on pictures than words. Suggested that a representative from the Parks and Recreation Department be consulted to help develop potential mitigation measures at La Mesa Park.
7. Stated that it would be helpful to develop feasible alternatives, conduct an analysis of the alternatives.
8. Stated the focus of the EIR should not be narrowed so much that the utility of the document is lost. Alternatives need to include an analysis of impacts to other issue areas.
9. Stated an alternative-based EIR should be considered, where a discussion of alternatives makes up the bulk of the document.

Ms. Hubbell stated that if an impact cannot be mitigated, the Commission must decide if the project results in a public benefit that outweighs the unmitigable impact.



State of California - The Resources Agency  
**DEPARTMENT OF FISH AND GAME**  
<http://www.dfg.ca.gov>  
4949 Viewridge Avenue  
San Diego, CA 92123  
(858) 467-4201

ARNOLD SCHWARZENEGGER, Governor



April 27, 2005

Renee Brooke  
City of Santa Barbara  
P.O. Box 1990  
Santa Barbara, CA 93101

**Draft Mitigated Negative Declaration for  
the 1837.5 El Camino de la Luz Project  
SCH #2005041031, Santa Barbara County**

Dear Ms. Brooke,

The Department of Fish and Game (Department), has reviewed the above Draft Mitigated Negative Declaration (DMND) for impacts to biological resources. The project applicant proposes construction of a 1,499 ft.<sup>2</sup> residence with attached 443 ft.<sup>2</sup> garage on a ½ acre bluff-top lot overlooking the Pacific Ocean. The proposed project site is located at 1837 ½ El Camino de la Luz in the West Mesa neighborhood in the City of Santa Barbara. The proposed building site is composed vegetatively of non-native grasses and forbs growing on a substrate consisting primarily of asphalt and is of little wildlife value. Lighthouse Creek borders the proposed project site on the east. A proposed site drainage system would include installation of drain pipes and a rip-rapped dissipater in the creek bed. Measures proposed to mitigate potential impacts to Lighthouse Creek include habitat restoration of the creek's west slope and development of an erosion control/water quality plan.

The following statement has been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines §15386(a)) and pursuant to our authority as a Responsible Agency (CEQA Guidelines §15381) over those aspects of the proposed project that come under the purview of the Fish and Game Code Section 1600 et seq.:

**Streambed Alteration**

The construction of the residence and installation of the proposed drainage system into Lighthouse Creek will require issuance of a Streambed Alteration Agreement under Section 1600 et seq., prior to commencing work. You may call our San Diego office at (858) 636-3160 to initiate the 1600 process. You may also obtain an application package online by visiting the Department's website at [http://www.dfg.ca.gov/1600/notification\\_pkg.html](http://www.dfg.ca.gov/1600/notification_pkg.html). The Department emphasizes that in order to protect sensitive resources, substantial revisions to the proposed project may be required in the SAA.

**RECEIVED**

MAY 03 2005

CITY OF SANTA BARBARA  
PLANNING DIVISION

Ms. Renee Brooke  
April 27, 2005  
Page 2 of 2

Thank you for this opportunity to provide comment. Questions regarding this letter and further coordination on these issues should be directed to Mr. Martin Potter, Wildlife Biologist, at (805) 640-3677.

Sincerely,

Ms. Morgan Wehtje  
Environmental Scientist IV

cc: Mr. Martin Potter  
Department of Fish and Game  
Ojai, California

Ms. Natasha Lohmus  
Department of Fish and Game  
Santa Barbara, California

Mr. Scott Morgan  
State Clearinghouse  
Sacramento, California



RAFAEL & LINDA FRANCO  
1835 El Camino de la Luz  
Santa Barbara, CA 93109

RECEIVED

APR 13 2005

CITY OF SANTA BARBARA  
PLANNING DIVISION

April 11, 2005

Santa Barbara Planning Commission  
630 Garden Street  
Santa Barbara, CA 93101

Re: Draft Mitigated Negative Declaration -ENV2002-00214

Honorable Commissioners:

This letter is written in response to the subject Draft MND.

First of all, we would like to thank the SB Planning Department for a superior study, better than anything prepared for this project since it was first submitted on Jan 23, 1989. This project has had a long history of incomplete submittals, inadequate review, and wasted inconclusive hearings. It's nice to finally get to the issues.

Undermining all of these efforts, however, is the fundamental flaw, if not fraud, in the original title and subdivision of this parcel. The SB City Council approved the subdivision on May 29, 1958 under the premise that the property owner held title to legal access to the proposed subdivided parcel. This has been contested, litigated, and found title to be deficient. The history and evidence of this issue has been submitted to the Planning Department numerous times, copies of which are submitted herewith.

On November 17, 1995, after litigation against his title insurance company, the applicant executed a quitclaim deed of this access easement. This evidence prompted the SB City Attorney to write a letter to James Lindsey, attorney for the applicant, stating that

**"it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of the parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."**

We are not aware that this proof has ever been produced by the applicant, and therefore we ask one more time, **WHY ARE YOU PROCESSING THIS APPLICATION?** It appears to us, and all of our neighbors that we are putting the cart before the horse.

Nonetheless, we have reviewed the Draft MND and offer the following comments:

#### AESTHETICS

1. The significant degradation of the public scenic vistas is noted as a significant impact, mitigable. The noted mitigation is to move the house to the west and sink it into the bank so it is not visible from La Mesa Park. The plans submitted do not indicate this suggestion. More significantly, if the house were moved further to the west, it would be in contradiction to the geologic recommendations of all of the geotechnical consultants for the applicant and the reviewer for the City. This area of the site is underlain by an 8 to 13 feet of alluvium not suited for foundations. Thus the proposed mitigation would exacerbate the geotechnical impact.
2. Page 5 states that the "proposed development is generally compatible with existing single family residential development in the immediate area". We would like to note a subtle but very important planning detail that has been overlooked. The houses along the bluff were all sited with 8 foot receding offsets from each other so as to preserve the views of all of the neighbors as well as blending into the hillside. The location of the proposed house would be contrary to this established pattern and would stick out like a sore thumb.

#### BIOLOGICAL RESOURCES

1. The report provided by the Planning Department, attached to the Draft MND, had a number of pages missing. It is therefore difficult to comprehensively comment on its adequacy.
2. The consultant states that the site was visited on Sep 14, 2001, and that "the entire site was walked on foot". We note however that no mention is made of the fresh water pools at the bottom of the creek, the numerous frogs, and other fauna living in this area. No investigation was made for possible red legged frogs in this area, a reasonable objective considering their presence in the Arroyo Burro area.
3. No mention is made of the red fox dens that exist across the creek from the property. While red foxes may not be a protected species, we note this to question the adequacy of the report. Red foxes have lived there for years.

#### GEOPHYSICAL CONDITIONS

Before we comment on specific issues, we would note that the Peer Review of the numerous geotechnical studies was comprehensive, and conclusive, and in fact, the consultant went beyond the normal scope of reviewers in analysing the eastern and southern slopes. This was done by the reviewer because it was omitted in all of the 17 previous report and update letters. There are numerous differences of opinions and contradictions in these reports; the reviewer did a good job in sorting through these to reach his own conclusions.

1. On page 8 of the report, the reviewer notes, "there is still an unfulfilled need for a better evaluation of the stability of the slopes at the parcel".
2. The report and previous reports note the evidence of previous slide in the SE corner of the site. The report concludes that "no residential construction should be considered for the SE corner of the subject parcel because of the likelihood that it is a landslide block of minimal strength"
3. We disagree with the definition of the "bluff edge" to determine the required 75 year setback. The reviewer even comments that the California Coastal Commission's definition of "bluff edge" is "somewhat arbitrary". Looking at the topographic profiles in Figure 3, we would disagree with the definition and location of the "bluff edge" and suggest that the Commission actually visit and walk this bluff and make it's own determination.
4. While the underlying bedrock may be stable, the main problem that we have encountered over the past 23 years of living adjacent top the property is a number of surficial slides of alluvium such as underlies the flat portion of the parcel.
5. The applicant's topographic map is incorrect. A more accurate topo map is included in Fig. 1 of the report. We note this because drainage swales indicated on applicant's site plan would be impractical with the steepness of the actual slope.
6. The mitigation measures state that excavation will be balanced on site. How and where would this be done? This is an unreasonable and impossible mitigation measure considering the size and configuration of the parcel.
7. The applicant is proposing to divert all water flow to the creek below. Considering that this includes flow from large paved areas, motor oils, etc., this may have an adverse impact on the fauna living in the creek pools below. We suggest that a clarifier tank be installed and outflow diverted directly to the ocean.

#### RECREATION

1. The visual effects on La Mesa Park would be significant. We point out the numerous passive activities at this park including weekly Tai Chi classes, and areas for meditation and quiet enjoyment of some of the best framed vistas of the Channel Islands. We invite you to view "The People's Parks, the Greening of Santa Barbara", a videotape produced by the City's Parks Dept., in which, this specific spot is highlighted. The proposed project would irreversibly destroy these vistas.

#### BEACH ACCESS

1. This issue is totally omitted from the environmental analysis. **This perhaps the most controversial environmental issue in California and it is missing from the Draft**

**MND.** Coastal access was the foundation of CEQA. This parcel is the sole access point in this area of the Mesa, and something we have been using for 23 years. This issue must be considered in the environmental analysis of the project.

In conclusion, we repeat our objection to the processing of this application in contradiction to the Santa Barbara City Attorney's position of June 4, 1997 stating that "the City cannot process an application" until the applicant demonstrates that he has legal access to the property. In 16 years, the applicant has never spoken to the neighbors nor made any attempt to secure an easement; in fact he has done the opposite, he has signed a Quitclaim Deed for a portion of the required easement. In view of these facts, we believe that, although the City may legally be required to continue playing this game, it is a waste of everybody's time and money, and in fact, the process could be construed as the City leading the applicant down a very expensive path to denial, to which he can claim hardship at a later date.

Thank you for your consideration.

  
Rafael Franco

  
Linda L. Franco

#### Enclosures

Project Chronology and Chain of Title  
Quitclaim Deed Nov. 17, 1995  
City Attorney's letter of June 4, 1997  
Conditional Certificate of Compliance, Dec 8, 1999  
Letter to the Mayor and City Council, June 7, 2002  
Letter to the Architectural Board of Review and Site Line Study, June 7, 2002  
Letter to Dr Herbert Barthels re. Proof of Access Easement and Trespass, Sep 10, 2001  
Letter to the Planning Commission, April 1, 1996  
Daily Appellate Report for Tuesday, Sep 27, 1994, Barthels v. Santa Barbara Title  
Letter to the Planning Commission, Mar 18, 1996  
Letter to Margaret Heinrich, Planning Department, Mar 22, 1989



## **PROJECT CHRONOLOGY 1837.5 El Camino de la Luz**

### **CHAIN OF TITLE**

- 1948 1<sup>st</sup> National Bank to Kienzle Bk 826 pg 433
- 1949 Kienzle to Eaton Bk 883 pg 328
- 1962 Fred Eaton to Gertrude Eaton Bk 1941 pg 1400
- 1963 Eaton to Brewer #15214
- 1967 Brewer to Jenkins Bk 2184 pg 923
- 1976 Jenkins to Barthels Bk 2636 pg 1197

Dec. 1947 Blanco E. Fryer Tract is created. This shows three parcels encompassing the east end of El Camino de la Luz Bk 28 pg 124

Oct. 1948 Blanco Fryer Tract is further subdivided creating eight new parcels, and 15 ft. access easement. Bk. 29 pg 25

May 29, 1958 City Council approves request for lot subdivision. Requires recordation of such within 12 months.

Dec. 2, 1958 Eaton records a lot split creating 1837.5 El Camino de la Luz Bk 43 pg 84. She expands burden on the 15 ft. access easement without consent of other property owners.

April 1963 Eaton grants to Brewer an access easement 15 ft. x 350.95 ft. without consent of other property owners. She had a 15 ft x 205.18 ft. easement to her property. #15214. Across 1937 El Camino de la Luz she limits the easement to 10 ft due to location of the existing house.

1976 Barthels buys the property for \$24,500.

Sep. 26, 1988 Barthels was authorized by SB Planning Dept to file an application

Jan 23, 1989 Barthels files a master application for a 2,500 sq. ft. home.

Mar 22, 1989 Affected property owners send letter to the SB Planning Department outlining 10 different issues to be considered in reviewing this project.

April 1989 Jerald Haws, attorney for Joanna Morgan advises Santa Barbara Title Company that Gertrude Eaton did not have any interest in Parcel 46 and the Deed to Barthels is spurious.

Santa Barbara Title Company agreed the title was spurious and issued a check to Barthels for \$42,875 representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued Santa Barbara Title for \$800,000 plus \$280,000 for his time, and attorney's fees. Santa Barbara Superior Court Judge Patrick L. McMahon awarded the \$42,875 for the

property, \$21,524.40 for his out of pocket expenses, and \$10,000 for his time @ \$66.66 per hour. At trial, Barthels testified that there was no easement and therefore his property was worthless.

In 1994 Barthels appeals to the Second Appellate District. The appeals court affirms the decision of the lower court. See Daily Appellate Report Tuesday, September 27, 1994.

On 30 Nov. 1995 a quitclaim deed is recorded whereby Barthels quitclaims any interest in Joanna Morgan's property, including her half, 7.5 ft. of the 15 ft. access easement.

On April 1996 Franco writes a letter to the Planning Commission questioning the 15 ft. access easement to the Barthels parcel.

Jun 4, 1997 City Attorney writes letter to James Lindsey, attorney for Barthels, informing him that "it is the City's conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 ft. wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."

Dec 8, 1999 SB City Engineer issues a Conditional Certificate of Compliance for the lot conditioned with the following specific condition: "Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split." No notice of this action is sent to neighbors.

September 10, 2001 the Francos, Wrights and Sloans sent a letter via certified mail to Barthels requesting proof of easement or right to access, demanding that Barthels stop trespassing across their properties.

June 2002 Barthels submits revised plans for a smaller residence to ABR.

Jun 7, 2002 Franco writes a letter to the ABR and City Council questioning the process, lack of an Initial Study and CEQA review.

Nov. 7, 2003 Affected property owners submit comments on the proposed project and the history of the parcel, including a copy of the Daily Appellate Report for Sep 27, 1994.

Nov. 2003 ABR reviews the project, makes comments about size and sizing, and refers the project to the Planning Commission to review the environmental issues.

RECORDING REQUESTED BY  
HAWES, RECORD, WILLIFORD & MAGNUSSON

AND WHEN RECORDED MAIL THIS DEED ~~XXXXXXXXXX~~  
~~XXXXXXXXXX~~ TO

NAME David W. Magnusson  
HAWES, RECORD, WILLIFORD & MAGNUSSON

STREET ADDRESS 201 E. Figueroa St.

CITY, STATE & Santa Barbara, CA 93101  
ZIP CODE

95-066679  
Recorded  
Official Records  
County of  
Santa Barbara  
Kenneth A Pettit  
Recorder  
3:26pm 30-Nov-95  
CARD MM 4

Rec Fee	14.00
AU2	2.00
CR Crd	16.00

CUMENTARY TRANSFER TAX \$ 0  
COMPUTED ON FULL VALUE OF PROPERTY CONVEYED, OR  
COMPUTED ON FULL VALUE LESS LIENS & ENCUMBRANCES  
REMAINING THEREON AT TIME OF SALE.

QUITCLAIM DEED

Don Magnusson  
Signature of declarant or agent determining tax - firm name

For a valuable consideration, receipt of which is hereby acknowledged, Herbert E. Barthels, as the present owner of that certain real property described in that certain document recorded as Document No. 52624 in Book 2636, Page 1197 of Official Records in the County Recorder Office of Santa Barbara County, California, does hereby remise, release and forever quitclaim to JOANNA K. MORGAN, any and all prescriptive easement rights which HERBERT E. BARTHEL'S heretofore or presently may claim in and to any portion of that certain real property owned by Joanna K. Morgan and particularly described as set forth in Exhibit A attached hereto and made a part thereof.

DATED: November 17, 1995.

Herbert E. Barthels  
HERBERT E. BARTHEL'S

STATE OF CALIFORNIA )  
COUNTY OF SANTA BARBARA )

On this 17th day of November, in the year of 1995 before me, the undersigned, a Notary Public in and for said State, personally appeared Herbert E. Barthels, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed it. WITNESS my hand and official seal.



April J. Luby  
Notary Public in and for Said State

EXHIBIT A  
Legal Description  
(APN 45-100-46)

PARCEL ONE: That portion of the Outside Pueblo Lands of the City of Santa Barbara, in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4" survey pipe set at the north-westerly corner of Parcel One of the tract of land described in the deed to Sara Wardell, an unmarried woman, recorded February 24, 1953, as Instrument No. 2814, in Book 1131, Page 295, of Official Records; thence along the northerly line of said Wardell Tract south 84° 44' east 59.76 feet to the northeast corner thereof; thence along the easterly line of said Wardell tract south 5° 16' west 107.85 feet to a 1/2" survey pipe; thence north 84° 44' west 59.76 feet to a 1/2" survey pipe set on the westerly line of said Wardell tract; thence north 5° 16' east and along the westerly line of said Wardell Tract, 107.85 feet to the point of beginning.



**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

No. 5907

State of California

County of Santa Barbara

On November 17, 1995 before me, Sybil J. Daly, Notary Public,  
DATE NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared HERBERT E. BARTHELS,  
NAME(S) OF SIGNER(S)

☐ personally known to me - OR - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Sybil J. Daly  
SIGNATURE OF NOTARY

**OPTIONAL**

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

**CAPACITY CLAIMED BY SIGNER**

- ☐ INDIVIDUAL  
☐ CORPORATE OFFICER

TITLE(S)

- ☐ PARTNER(S) ☐ LIMITED  
☐ GENERAL  
☐ ATTORNEY-IN-FACT  
☐ TRUSTEE(S)  
☐ GUARDIAN/CONSERVATOR  
☐ OTHER: \_\_\_\_\_

SIGNER IS REPRESENTING:  
NAME OF PERSON(S) OR ENTITY(IES)

**DESCRIPTION OF ATTACHED DOCUMENT**

TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

DATE OF DOCUMENT

SIGNER(S) OTHER THAN NAMED ABOVE

**ILLEGIBLE NOTARY SEAL DECLARATION**

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the Notary Seal on the document to which this statement is attached reads as follows:

NAME OF NOTARY SYBIL JULIA DALY

DATE COMMISSION EXPIRES July 22, 1996

COUNTY OF COMMISSION SANTA BARBARA

PLACE OF EXECUTION OF THIS DECLARATION SANTA BARBARA, CA

TODAY'S DATE 11-22-95

David M. Haws, Record, Williford & Magnusson  
Signature (Firm name, if any)



# CITY OF SANTA BARBARA

OFFICE OF THE CITY ATTORNEY  
DANIEL J. WALLACE,  
CITY ATTORNEY



740 STATE STREET, SUITE 201  
POST OFFICE BOX 1990  
SANTA BARBARA, CA 93102-1990  
TELEPHONE.....(805) 564-5326  
FAX.....(805) 897-2532

June 4, 1997

RECEIVED

JUN 05 1997

CITY OF SANTA BARBARA  
PLANNING DIVISION

James T. Lindsey  
Attorney at Law  
Granada Building, Suite 402  
1216 State Street  
Santa Barbara, California 93101-2613

Re: 1837 1/2 El Camino De La Luz (APN 45-100-65)

Dear Mr. Lindsey:

This letter is in response to the packages of materials you submitted to the City during our meeting of May 12, 1997 with your client, Dr. Herbert Barthels, and City Associate Planner, Susie Reardon, concerning the above-referenced parcel and Dr. Barthels's desire to file a development application for the parcel.

After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

During our meeting, I understood you to represent that the agreement between Dr. Barthels and Joanna Morgan dated November 17, 1995 provided that Morgan acknowledged Barthels's right to use the westerly 7 1/2 feet of the 15 foot wide easement which affects the Morgan property. However, in my review of the 1995 agreement, it appears to have very little to do with the 15 foot wide access easement and is mostly about the pedestrian trail beach access easement over the Barthels property which was otherwise in dispute between Morgan and Barthels. As a result, it still appears to us that the status of the 15 foot wide easement is unchanged from the stipulation filed in Morgan v. Barthels, et al. (Santa Barbara Superior Court Case No. 186256) wherein Dr. Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7 1/2 FEET," which stipulation was signed by the parties to the litigation and executed by Judge Stevens as an order. In fact, we presume that

James T. Lindsey  
June 4, 1997  
Page 2

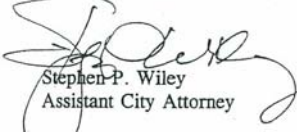
it was this stipulation/order which brought about Dr. Barthels prevailing in his Superior Court Case No. 182179 wherein he recovered damages from Santa Barbara Title.

Consequently, the question remains whether this parcel has the required legal access and the access which formed the basis of the City approving the original lot split in 1958. Based on my review of the "History" dated November 26, 1996 which you submitted, I am assuming that Dr. Barthels is now claiming either a prescriptive right to the 15 foot wide easement or that he has access rights by legal "necessity." While this may be the case, the City cannot assume it to be the case in the absence of any sort of final legal determination to that effect. This is particularly true where, as here, the record clearly indicates that the existence of the 15 foot easement vis-a-vis the Morgan property has been extensively litigated and, on its face, a claim of prescriptive right would otherwise seem to be barred by the legal doctrine of res judicata.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel.

Please do not hesitate to contact me should you or your client have further questions or need further assistance in this matter.

Very truly yours,

  
Stephen P. Wiley  
Assistant City Attorney

cc: Don Olson, Asst. Community Development Director  
Susie Reardon, Associate Planner



RECORDING REQUESTED BY AND WHEN )  
RECORDED, PLEASE RETURN TO: )

City Engineer )  
City of Santa Barbara )  
P.O. Box 1990 )  
Santa Barbara, CA 93102-1990 )

APN 045-100-065

Recorders Office  
County Of  
Santa Barbara  
KENNETH A. PETTIT  
Recorder  
LARRY B. HERRERA  
Assistant

1999-0895608  
REC FEE 13.00  
TOTAL 13.00  
GOVT CHARGE 13.00-  
TOTAL TENDERED 13.00-  
CHANGE .00

03:37PM 08-Dec-1999 19991208000359  
FIM C6143

CONDITIONAL  
CERTIFICATE OF COMPLIANCE

Pursuant to California Government Code Section 66499.35, in response to written application and request by the owner of the real property described herein, or in response to request by a vendee of the owner of the real property pursuant to a written contract of sale, this Conditional Certificate of Compliance is issued by the City Engineer of the City of Santa Barbara, and recorded in the Official Records, in the Office of the County Recorder, County of Santa Barbara, State of California.

This Conditional Certificate of Compliance is issued for that certain real property in the City of Santa Barbara, County of Santa Barbara, State of California, being more particularly described as follows:

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERLY END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 350.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.72 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 172.46 FEET TO A POINT; THENCE NORTH 4°26' EAST 58.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 22°07' WEST 37.85 FEET TO A 1/2 INCH SURVEY PIPE; THENCE

NORTH 54°01' WEST 63.20 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 38°33' EAST 27.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87°44' WEST 113.35 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

In order to provide compliance with California Government Code §66410 et seq., the Subdivision Map Act, pertaining to the division of real property, and with local ordinances adopted pursuant to the Subdivision Map Act, development of the real property pursuant to this Conditional Certificate of Compliance shall be subject to complete compliance with the condition imposed herein.

Upon compliance with the condition of this certificate the real property described herein shall comprise one (1) legal parcel. This certificate relates only to issues of compliance or noncompliance with the Subdivision Map Act and local ordinances enacted pursuant thereto. Upon compliance the parcel described herein may be sold, leased, or financed without further compliance with the Subdivision Map Act or any local ordinance enacted thereto. Development of the parcel may require issuance of a permit or permits, or other grant or grants of approval.

The real property described herein is required to comply with the following specific condition:

Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split.

All permits of the City of Santa Barbara needed by the owner of the real property described herein for the development of improvements, including any development of improvements to implement the above condition, and permits and other grants of approval for the development of the real property in the future shall be subject to the condition listed above.

This Conditional Certificate of Compliance shall be recorded in the Official Records of the County of Santa Barbara to run with the land and to serve constructive notice to the property owner, and to any subsequent vendees, grantees, heirs, transferees or assignees of the real property, that the fulfillment and implementation of the condition set forth herein shall be required prior to any subsequent



issuance of City permits or other grants of approval for development of the real property.

Compliance with the foregoing condition by the owner of the real property described herein shall not be required until such time as a permit or other grant of approval for development of the real property is issued by the City of Santa Barbara.



[Seal]

CITY OF SANTA BARBARA

By: R. Patrick Kelly  
R. Patrick Kelly, City Engineer

RCE No. 27077 Exp. 3/31/01

Assessed Owner: Herbert E. Barthels, Trustee  
Mailing Address: Herbert E. Barthels Trust dated December 9, 1985  
1809 Cliff Drive, Suite C  
Santa Barbara, CA 93109

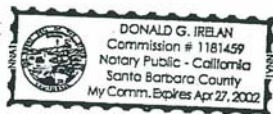
#### ACKNOWLEDGMENT

STATE OF CALIFORNIA )  
COUNTY OF SANTA BARBARA )

On DECEMBER 8, 1999, before me, DONALD G. IRELAN, NOTARY PUBLIC, personally appeared R. PATRICK KELLY, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person (s) whose name (s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature (s) on the instrument the person (s), or the entity on behalf of which the person (s) acted, executed the instrument.

Witness my hand and official seal.

Signature Donald G. Irelan



[Seal]

Rafael Franco & Linda L. Franco  
1835 El Camino de la Luz  
Santa Barbara, CA 93109

#### TRANSMITTAL

Date: June 7, 2002

To: Mayor and Santa Barbara City Council  
Santa Barbara City Hall  
De La Guerra Plaza  
Santa Barbara, CA 93101

Re: 1837.5 El Camino de la Luz

Attached please find a copy of our letter to the Architectural Board of Review regarding the subject property. As of this date, no one from the Planning Department has answered our question posed in our letter of April 6, 2002. Why is this project being considered for approval by the ABR without a complete application, environmental review, or Initial Study? It does appear as though the process is a bit backwards; let's approve the design and then argue environmental impacts. Shouldn't we be looking to see if the conditions of approval stipulated in the 1958 lot split and "CONDITIONAL CERTIFICATE OF COMPLIANCE" have been met before we waste a lot of time and aggravation for the neighborhood? **This is not a legal lot until those conditions are met.** I would appreciate an answer in this matter.

Thank you for your assistance.

Sincerely,

A handwritten signature of Rafael Franco.

Rafael Franco

Rafael Franco & Linda L. Franco  
1835 El Camino de la Luz  
Santa Barbara, CA 93109

June 7, 2002

Santa Barbara Architectural Board of Review  
City Planning Division  
P.O. Box 1990  
Santa Barbara, CA 93102-1990

Re: 1837.5 El Camino de la Luz

Dear Board Members:

You have previously received correspondence questioning why this project was being reviewed by the ABR when the proponent has yet to provide evidence of legal access to this parcel after 44 years of conditional approval of the lot split. I will not belabor this point, but as it seems that you are going to go through this exercise anyway, I wish to address issues that typically fall within your jurisdiction.

Since you are being asked to review and approve this project, I would first question the legality of the process. As of this date, I am not aware of the application for the project being deemed complete, nor any initial study performed as required by CEQA. I am not aware of any environmental review by the Planning Department on this project. There are numerous issues that need to be addressed and determinations made prior to any review and approval procedure. You are not a design review committee, you are the Architectural Review Board for the City of Santa Barbara, and your administrative review and approval is subject to CEQA.

Before you can review the architectural issues for this project, a determination must be made to establish where is the top of the bluff. We contend that the plans submitted erroneously locate the top of the bluff. If you refer to the enclosed photograph from 1972, the top of the bluff is clearly identified. This is critical because it is the basis for determining the required southerly setback for the project. The top of bluff line indicated on the proponent's plan is incorrect. The area indicated as the top of the bluff, where the brick planter is located, is actually artificial fill or a previous slide. To verify this, please walk down the path and look at the exposed rubble below the flat area where the planter is located. See the broken shale intermixed with the clay soil.

What is the required bluff setback, and what is the erosion rate? Enclosed please find an erosion analysis comparing the bluff in May 1995 and May 2001. As you can see, there was a massive slide in 1995 the year of El Nino. The photographs clearly indicate that there has been 30 to 40 feet of erosion of this bluff in just six years. Since 1985 we have had two additional surficial slides immediately below the site for the proposed residence. Without

establishing the top of the bluff, the erosion rate and the required bluff setbacks, any architectural review is moot.

CEQA also requires that the environmental review of visual impacts, including obstruction of views, Quail Botanical Gardens v. Encinitas (Cal. App. 4<sup>th</sup> Dist. 1994) 35 Cal Rptr. 2d. 470 ("Quail"). We have not seen any submittal by the applicant that addresses this issue. We are including an aerial photograph outlining the view corridor, and comparative photos of views from the park. It is not just the obstruction of views of neighbors; this project would have a significant impact on the views from the public park. Allowing this obstruction would be a tragic mistake.

The applicant has proposed driveway drainage directly into the creek. The plans identify this as a drainage course. Please be very clear, this is not a gutter, it is a natural creek, with significant fauna and life. Where is the environmental analysis? What are the NPDES requirements? What is the mitigation? The proposed drainage spills over to a proposed riprap. The location of this proposed structure is not even on their property, **it is on Federal Land!**

The site plan is incomplete. Not to beat a dead horse, but the architect failed to indicate how this house gets access to the street as required by Code, and the Conditional Certificate of Compliance issued in 1958. How can you approve a site plan if you don't have access to the site?

The site plan indicates an 18-inch pine tree to be preserved. Please note on your site visit that this tree has been dead for five years.


As I indicated in my previous correspondence, we are challenging the process because we believe that you cannot take any action until the environmental review process is complete as required by CEQA.

Thank you for your consideration.

Sincerely,



Rafael Franco



Linda L. Franco





## **Appendix B**

### **2009 Geological Trench Inspection Trench Report**







25 August 2009

Mr. Daniel Gullett, Associate Planner  
Santa Barbara City Community Development Department  
630 Garden Street  
Santa Barbara  
CA 93102-1990

RE: Geological Inspection Trench at 1837½ Camino de la Luz

Dear Mr. Gullett,

A trench inspection was made for the purpose of determining if a reported "bedding plane fissure" is located on the proposed building site at the subject address. This investigation was required to determine if such a fissure affects the location and stability of the building site.

The need for this inspection resulted from my peer review of geologic documents related to the subject parcel. One of these documents, a geologic report by R.J. Smith reported a bedding plane fissure observed near the beach that he projected northward. On the basis of his findings Smith indicated that the area underlying the present paved area at the NW corner of the subject parcel should not be considered for the placement of a house. Conditions in the field were such that Smith's projection of his reported fissure could not be verified by direct visual inspection. Instead, I used the data presented on the geologic map prepared by Smith and calculated the position of the putative fissured bedding plane.

A later geologic study by CGF consultants presented a different geologic map of the subject parcel. I performed the same kind of analysis of the data on the CGF geologic map. A technique wherein the intersection between a dipping stratum and the surface topography can be determined was applied to each map by the writer to verify Dr. Smith's and CFG's results.

Disparate results were obtained from their maps. The cause of this is the location and accuracy of measurements of the attitude of the Monterey strata on the subject parcel made by Smith and by CGF. It is evident that the exact position of the fissure, if it indeed exists needed to be determined by visual inspection of a trench transecting the vicinity of the paved area.

It is important to resolve the issue of this putative fissure. Smith and others have declared that the fissure represents a plane of weakness along which a block slide could occur. They assert that the block slide would involve all the material west of the plane of the fissure. Although the block is buttressed on the west some sort of failure needs to be taken into account in locating the safe building envelope on the subject parcel. Further, if the putative failure plane exists on the subject building site it needs to be ascertained whether it represents a plane of weakness or not. If an inspection reveals that the putative fissure is not present it can be concluded that there is no block slide threat to a building from the fissure mapped by Smith and CGF. In such a case no further such investigations would be necessary.

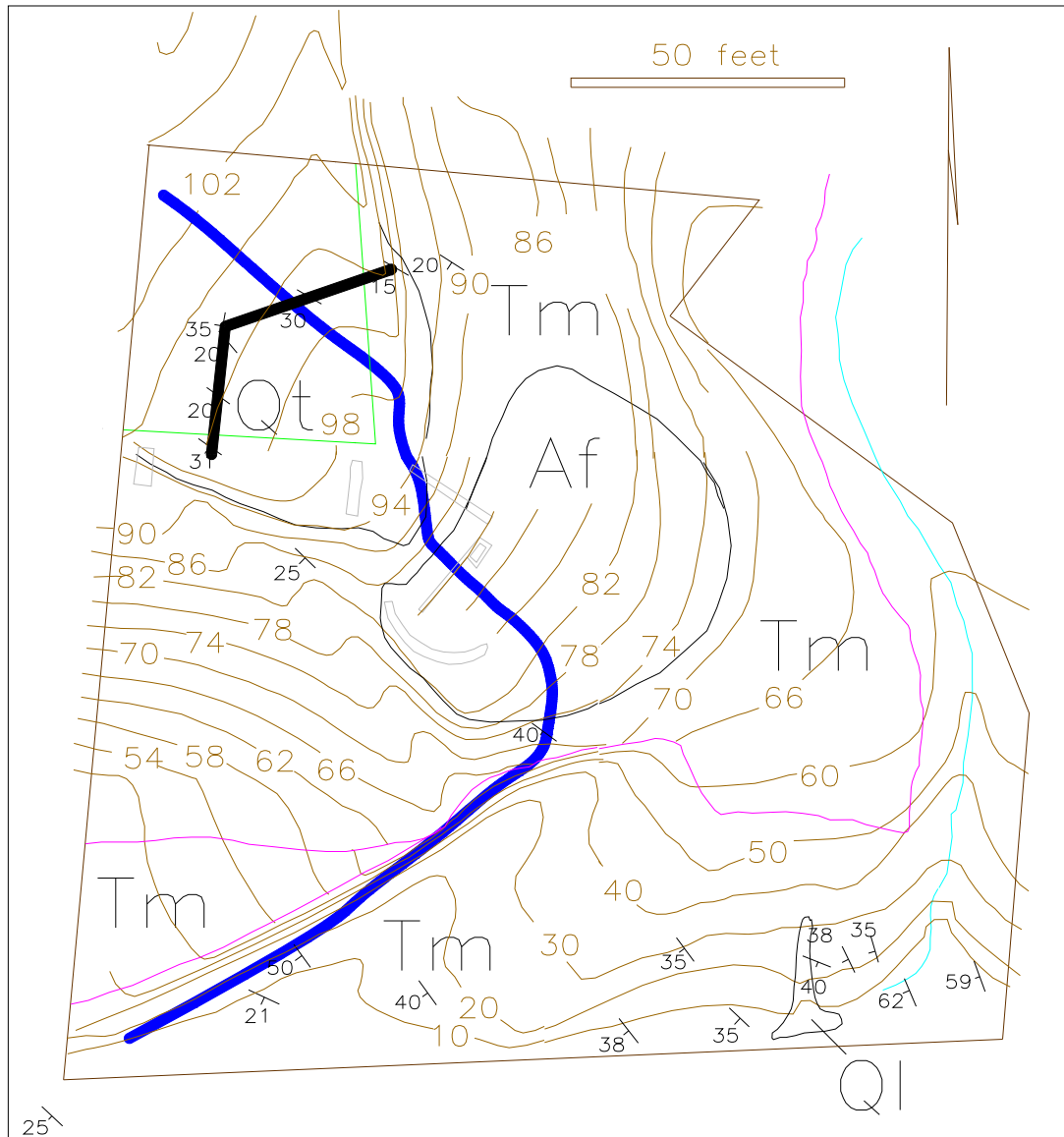
The location of the inspection trench is indicated on Figure 1. The location was chosen to be in a position to either prove or disprove the existence of the putative fissure. The trench was dug in two segments 19 feet long and 3 feet wide. The trench was excavated to a depth of 8 feet as determined by the depth of the subcrop of the Monterey strata. The trench was excavated using an extendable-boom backhoe. The excavator is 7 ft wide with a bucket 1½ feet wide. Excavated soil was placed adjacent to the trench temporarily.

Inspection was performed by visual examination of the bottom of the trench. The trench was scraped clear of loose material so that the bedrock substrate was exposed. The wall of the trench was photographed and mapped by the writer. After the inspection the trench was backfilled with the original stored soil material which was moistened and compacted to approximately 95% relative compaction. The trench remained open less than a single day. It was revegetated with original, native vegetation at the east and south ends of the trench segments. Elsewhere the trench was repaved with macadam and the curbs reconstituted using concrete.

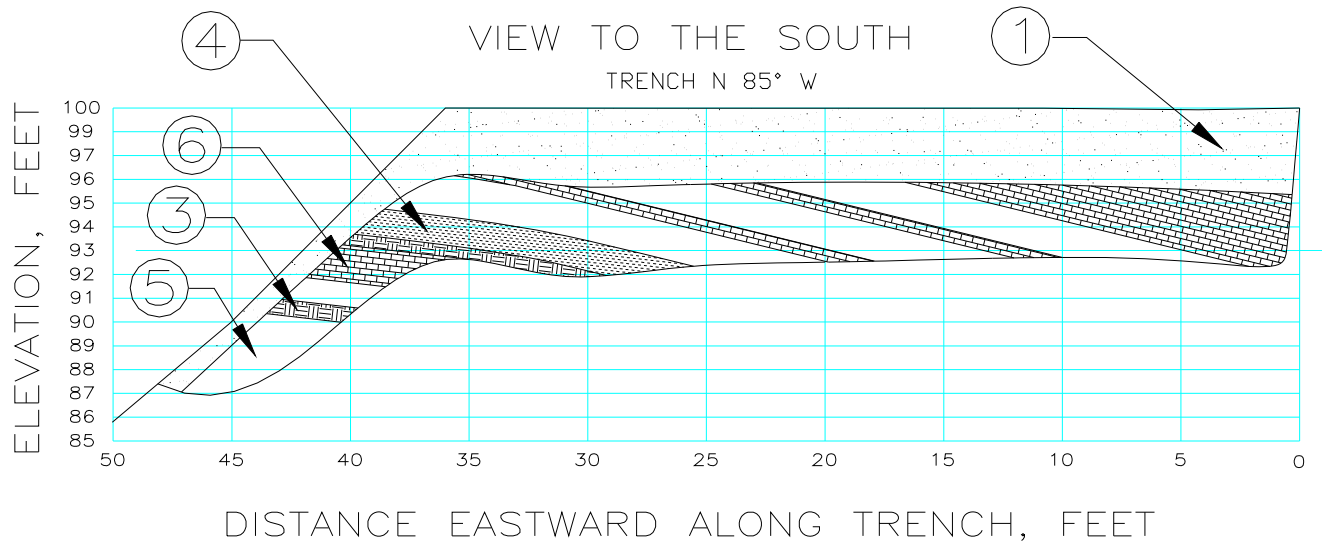
Three samples of the substrate were obtained during the inspection of the trench, but they were not all undisturbed samples. One sample needed to be reconstituted for shear testing, one was suitable for such analysis, but a third could not be reconstituted.

## **TRENCHING**

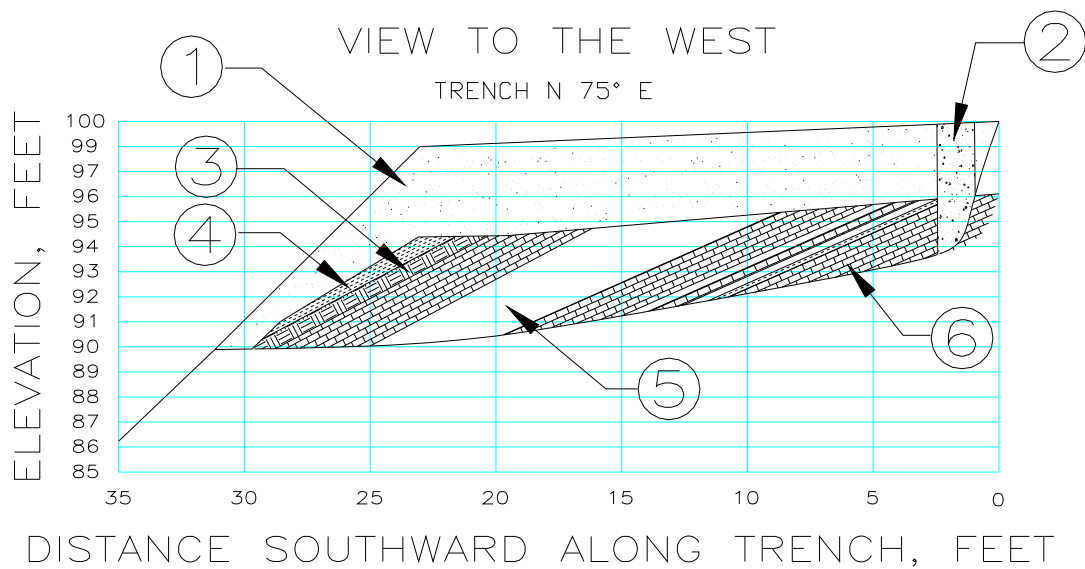
The walls of the trench were observed and mapped by the writer. The results of this work are shown in Figures 2 and 3. The circled numbers refer to materials observed on the wall of the trench. The descriptions of the materials are as follows.



**Figure 1. Map of the parcel at 1837½ Camino de la Luz. The position and orientation of the geologic exploratory trench is shown by the heavy black line. The trench is in two segments. The E-W segment is 45 feet long. The N-S segment is 31 ft long. Both segments are approximately 2½ feet wide by 8 feet deep. The heavy blue line marks the expected position of the subcrop of the subject bedding plane.**



**Figure 2. Map of the southern wall of the trench dug at 1837½ Camino de la Luz. The circled numbers and hatching symbols refer to the type of substrate materials which are described in the text.**



**Figure 3. Map of the western wall of the trench dug at 1837½ Camino de la Luz. The circled numbers and hatching symbols refer to the type of substrate materials which are described in the text.**

1. Dark gray-brown sandy alluvium and artificial fill.
2. Backfilled trench materials derived from trench excavation.
3. Dark gray dense claystone. Sample B-2

4. Light brown, fissile shale, thin bedded with laminae about 2 mm thick. Often interbedded with Unit 5 below. Sample B-1
5. Tan shale, thin bedded (½" to 1" thick) and interbedded with fissile, white silty clay seams a few mm thick and about 6" apart. Sample B-3
6. Massive light tan siliceous marl with beds 1 to 2 ft thick.

The units exposed in the trench are part of the Mid to Late–Miocene Monterey formation. The formation is overlain unconformably by unconsolidated materials consisting of sandy alluvium or artificial fill.

No evidence of an open bedding plane fissure in the stratification of the Monterey strata was observed in the trench. Instead, massive to thin-bedded marl (calcareous and siliceous shale) strata are interbedded with thin seams of fissile silty shale or dense claystone where the geologic considerations indicate the fissure would occur.

The writer was able to examine the strata at the base of the coastal bluff where the putative fissure was reported to exist by Smith and CGF. The writer observed that a seam of fissile shale about 1½" thick interbedded between strata of thick marl strata had been scoured out to a depth of an inch or so by wave erosion. The scour apparently had been misinterpreted as a pervasive open fissure or petroliferous seam by the previous investigators.

Three samples were taken from the trench at locations shown on Figures 2 and 3. The samples were labeled and placed in sealed containers to preserve their water content. Two of the samples (B-2 and B-3) were subsequently subjected to shear testing by Braun Associates of Buellton, California. The results of the analyses are presented in the Appendix to this report.

The two samples were found to have appreciable apparent cohesion and a low angle of internal friction. Sample B-1 was from a seam of fissile shale. It could not be reconstituted for analysis. Sample B-2 was found to have a residual angle of internal friction of 15° and a residual effective cohesion of 600 psf. Sample B-3 was found to have a residual angle of internal friction of 16° and a residual effective cohesion of 1050 psf. The values of the internal angle of friction are typical of consolidated clay-rich materials. The cohesion values are larger than expected for such materials.

No faults or folds are evident on the subject parcel. No springs or shallow water table was encountered in the trenching on the parcel. The slope of the parcel is about 2.5° toward the southeast corner of the paved area at the site of the trench.

No moisture or free water was encountered in the trench. The substrate materials were quite dry, even at the bottom of the trench. A liquefaction hazard is unlikely to exist because of the lack of a high water table and because the sandy alluvium contains 50% or more of clay and silt.

## CONCLUSIONS



The evidence observed in the inspection trench establishes that the putative open bedding plane fissure does not exist on the subject property. Rather, the massive marl beds observable cropping out in the coastal bluff and observed in the trench are interbedded with fissle silty shale and claystone seams a few inches thick. The seams appear in the trench in the position inferred from a geologic analysis of the attitudes of the beds of Monterey formation at the subject parcel.

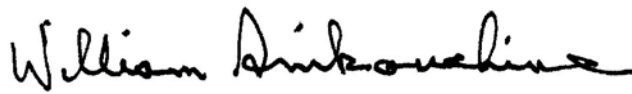
The fissle beds and claystone seams probably have the minimum shearing strength in the substrate materials at the subject parcel. Subsequent design of the structure to be built on the subject parcel should take this condition into account.

The strata under the subject parcel dip southward at an average angle of about 25°. However the N 60° W strike of these strata is not parallel to the E-W trend of the toe of the coastal bluff so they are buttressed on the west. This condition has caused failures of the coastal bluff elsewhere along the Santa Barbara shoreline to be rotational about an axis normal to the bluff face. The recent slide at Shoreline Park failed in this manner; the slide evident at the SE corner of the subject parcel probably did as well.

The nature of the slide kinematics requires that analysis of slope stability take this rotational effect into account. A simple block sliding model is not adequate as it would exaggerate the slide potential.

I hope that these findings are suitable for your purposes. Please contact me if you have any questions or comments.

Sincerely,



William Anikouchine PhD  
California Certified Engineering Geologist EG 1584



## APPENDIX

### Results Of Analyses of Samples Taken From The Exploration Trench

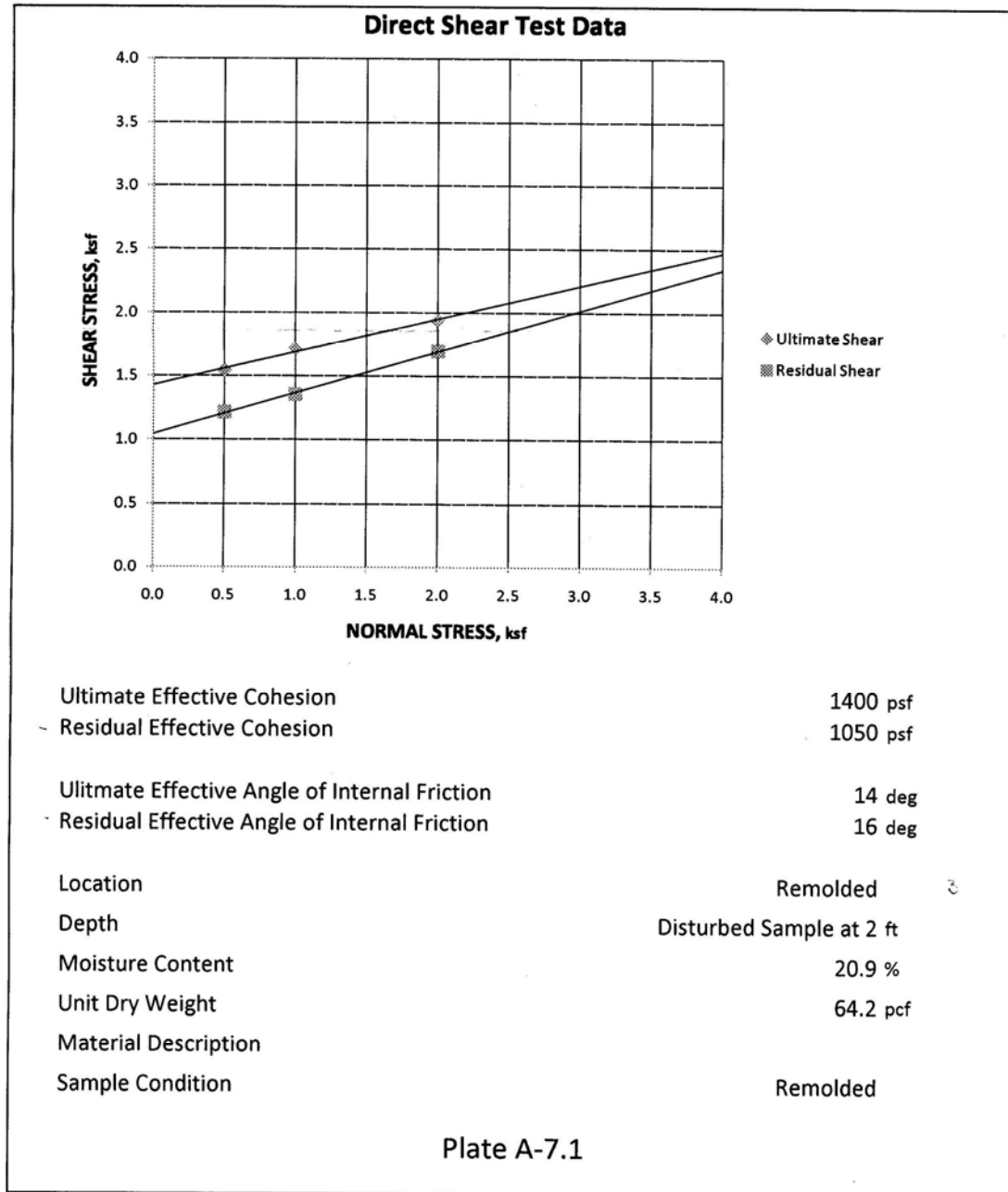


Figure 4. Results of Shear Test of Sample B-3.

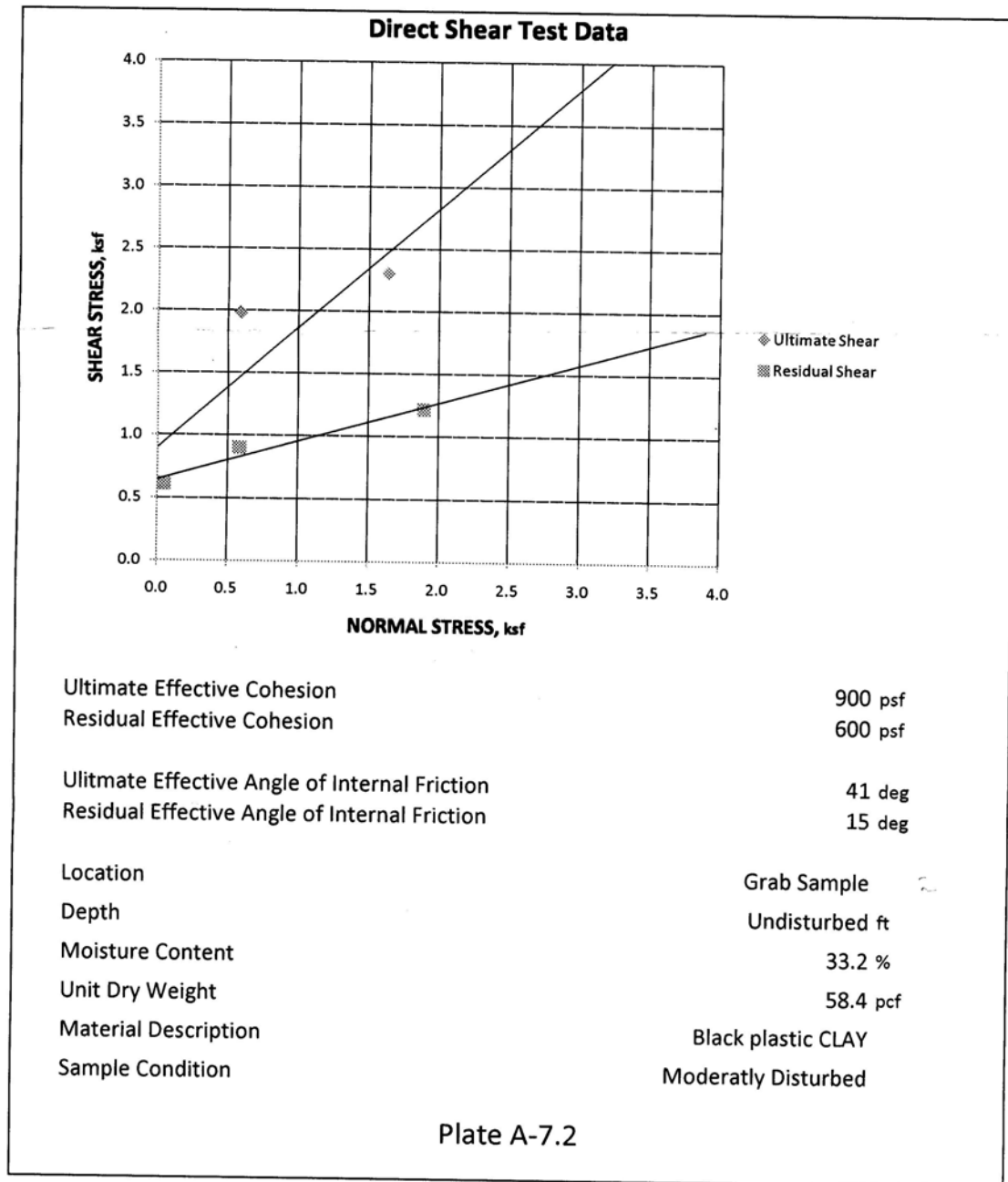


Figure 5. Results of Shear Test of Sample B-2.

## **Appendix C**

### **2011 Slope Stability Report**







Ms. Kathleen A. Kennedy, Associate Planner  
City of Santa Barbara Planning Division  
P.O. Box 1990  
Santa Barbara CA 93102

9 November 2011

RE: Geological Investigation of Slope Stability at 1837½ Camino de la Luz<sup>1</sup>

Dear Ms. Kennedy,

This report is in response to your division's request for a discussion of the geologic issues involved in evaluating the stability of the coastal bluff at 1837½ Camino de la Luz. A diagram of the subject parcel and adjacent terrain is shown in Figure 1.



**Figure 1. Isometric diagram of the topography of the coastal bluff from Lighthouse Creek on the east to about Oliver Street on the west. The scene is viewed toward the NW at an elevation several hundred feet above the top of the parcel (imagine a helicopter view) The diagram was constructed from topographic maps prepared from 1995 aerial photography. The subject parcel is outlined in black. The mesh size is 5 feet.**

<sup>1</sup> The proper name of this street is El Camino De La Luz, but the El is omitted in this report for the sake of brevity. Capitalization of the preposition, de and the article, la is also omitted following English standards.

## PREVIOUS WORK

The geologic work done so far has consisted of several years of individual examinations and reports which were subjected to a peer review by me. The report of that work dated 16 March 2005 is included here by reference.

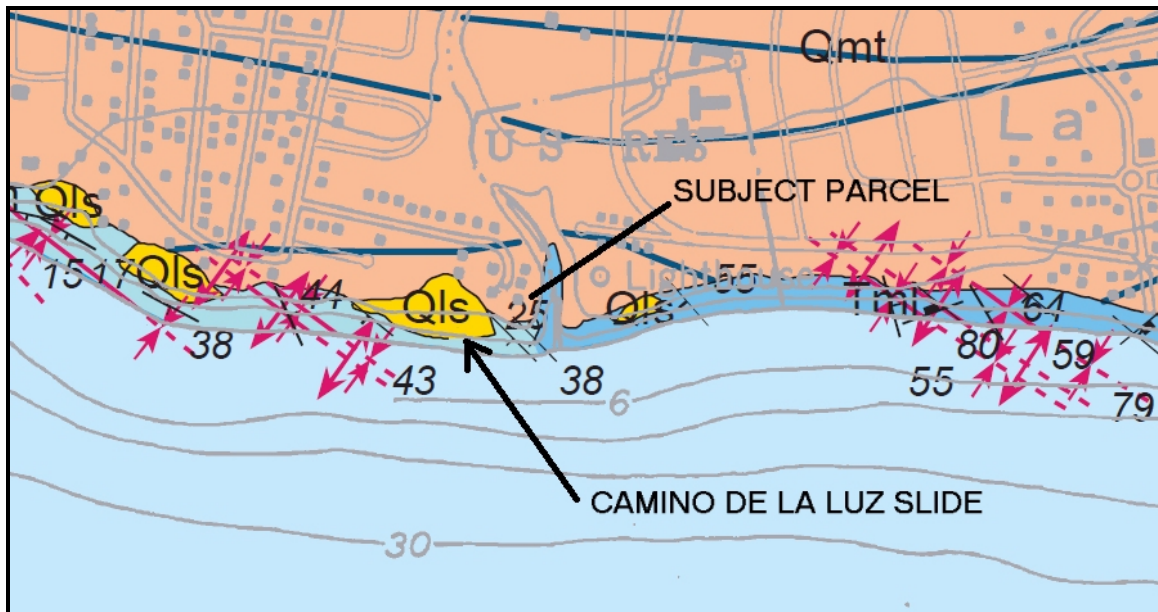


Figure 2. A portion of the geologic map by Minor et al (2006) showing features mapped by the USGS in the vicinity of the subject parcel. Qmt represents marine terrace unconsolidated deposits. Qls represents landslide deposits. Lighthouse Creek trends northward in the center of the figure. Tml represents lower Monterey beds cropping out on the east of the creek. West of the creek beds of the middle Monterey formation crop out in the coastal bluff. The contact between these beds at the mouth of Lighthouse Creek is an unconformity. The magenta lines and paired arrows mark the orientation and type of the fold axes that deform the Monterey beds. Large arrowheads depict anticlinal folds and small arrowheads depict synclinal folds. The attitude of the strata is indicated by the strike and dip symbol; the accompanying number indicates the dip in degrees. Scale is indicated by cultural features.

In the course of the peer review the matter of slope stability arose. No analysis of the stability of the subject parcel had been performed, only anecdotal mention that the slope was stable. In view of the proximity of the Camino de la Luz slide of 14 February 1978 the decision was to perform a stability analysis using existing strength data to determine if previous workers had overlooked a landslide hazard on the parcel.

The exploratory stability analysis using strength data obtained from the literature was included in the writer's 16 March 2005 report. The result of that analysis indicated that the slope appeared to be stable. However an open bedding plane fracture was claimed to be a potential plane of failure that transected the parcel. A geological inspection in an exploratory trench showed that the open fracture does not exist.

The observations in the trench established that the strata of the Monterey formation consist of beds of calcareous marl alternating with 6" to 8" layers of black claystone and thin bedded fissile shale. This alternation of lithology can be seen expressed in Figure 3.

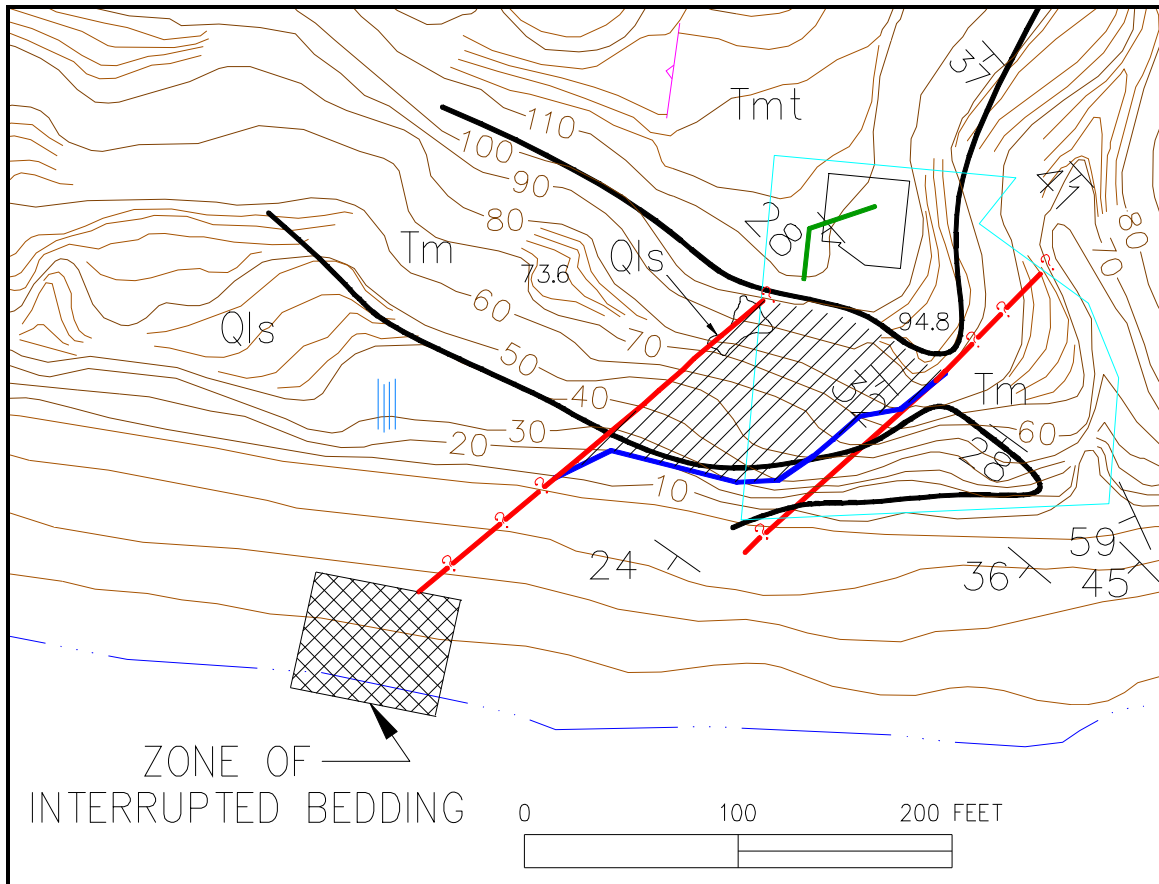
Shear strength values were obtained for samples of black claystone and fissile shale taken from the geologic inspection trench. The data are presented in the appendix of this report. They are from the writer's report of 25 August 2009 which is included here by reference.

The observations of the attitudes of Monterey strata and measurements of the strength properties of these rocks exposed in the exploratory trench allowed a more accurate and thorough analysis of slope stability at the subject parcel to be made. To accomplish this it was necessary to determine the manner and kinematics of potential slope failure and the evaluation of the likelihood of slope failure at the subject parcel.



**Figure 3. View downward and to the SE from the subject parcel at low tide. Monterey strata exposed on the wave-cut beach terrace show varying resistance to erosion by wave action. Note the large angle between the strike of the strata and the trend of the bluff face.**





**Figure 4.** Topographic map showing geological data used in the assessment of the potential for slope failure at 1837½ Camino de la Luz. The parcel boundary is outlined with a thin cyan line. The heavy black lines are contacts between relatively undisturbed Monterey formation beds (Tm), the unconsolidated materials capping the elevated marine terrace (Tmt), and landslide debris (Qls). The heavy red lines mark the location of fractures seen cutting the bluff. They are dashed and queried where uncertain. The heavy blue line shows the outcrop of the lowest bed in the Monterey formation that intersects the fracture in the bluff just west of the subject parcel. A photo of the zone of interrupted bedding is presented in Figure 14. Bedding attitudes are shown by strike and dip symbols and dip values in degrees. The light blue lines are drainage tubes extending to the beach (or nearly so) located by means of a GPS receiver. The proposed building footprint is outlined with a black line. The geologic exploration trench is shown by a heavy green line. Kinematically possible wedge failure is the hatched area between the fracture (heavy red line) and the bedding outcrop (heavy blue line). Hatching is limited to the observable extent of the fracture.

## PRESENT GEOLOGICAL WORK

Additional observations were necessary to complete the analysis of slope stability at the subject parcel. The writer conducted a geologic examination necessary for determining the kinematics of potential slope failure. This was followed by an evaluation of the likelihood of slope failure at the subject parcel.

The geologic examination consisted of:

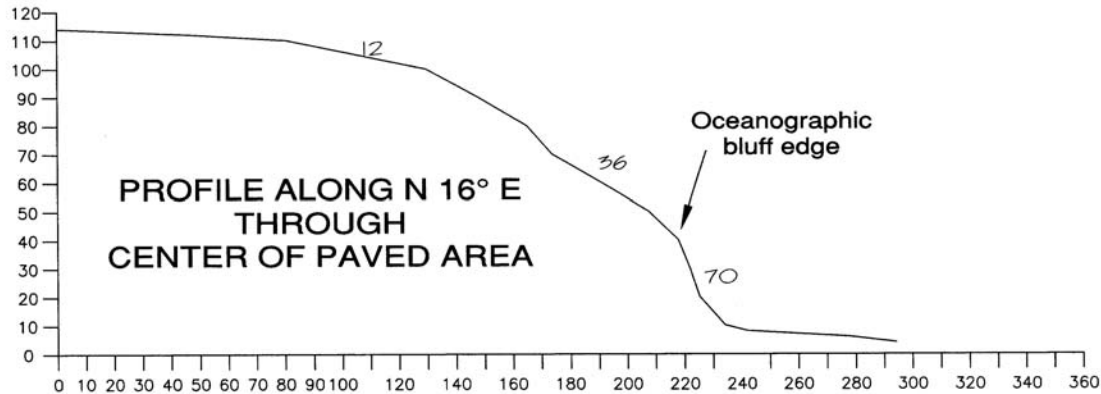
1. Measuring the attitude of the Monterey strata in the bluff face and on the wave-cut platform fronting the bluff at the subject parcel.
2. Examination of the bluff and wave-cut terrace for persistent fractures.

3. Inspection of the bluff for evidence of former slope failure.
4. Examination of bedrock exposures for asperities in the bedding planes and in fracture surfaces.

The findings of this examination are presented in the map on Figure 4. Bedding exposed on the wave-cut terrace permitted the best measurements of the attitude of the Monterey strata. Outcrops in the bluff often gave evidence of involvement in earth movement, particularly at the base of known landslides in this area.

The attitude and orientation of fractures were difficult to measure because of landslide debris cover, colluvium, and the lack of persistence for appreciable distances in the bluff face. Exceptions are the fractures transecting the subject parcel as shown on Figure 4<sup>2</sup>.

The attitude of the face of the coastal bluff at the subject parcel trends N 88° E and slopes 70° to the S at the base. The upper part of the face slopes 36° S (see Figure 5).



**Figure 5. Profile through the subject parcel showing the compound nature of the slope of the coastal bluff at 1837½ Camino de la Luz. The numbers are the local slope in degrees.**

The attitudes measured by the writer and other previous workers are shown on Figure 6 in the form of a stereonet plot. The plot shows evidence of bias in measurements by previous workers. Attitudes measured by CFG are biased about 5° clockwise. The Smith measurements are biased about 15° clockwise. It seems likely that a difference in the magnetic declination set on the geologist's compass could account for these biases. In addition, the map base used by Smith had an error in orientation with respect to North; this could explain the greater bias in his measurements.

The frequency distribution of attitudes were contoured and presented in Figure 7. This figure shows that the mean attitude of the bedding in the Monterey strata is a strike of about N 44° W and a dip of about 34° SW. The mean attitude of fractures in the coastal bluff is a strike of N 67 E and a dip of 78° SE. These average values were used in the subsequent analyses of slope stability at the subject parcel.

<sup>2</sup> These fractures can be seen clearly on oblique aerial photographs 200404820 and 200800766 of the California Coastal Records Project (<http://www.californiacoastline.org/>).



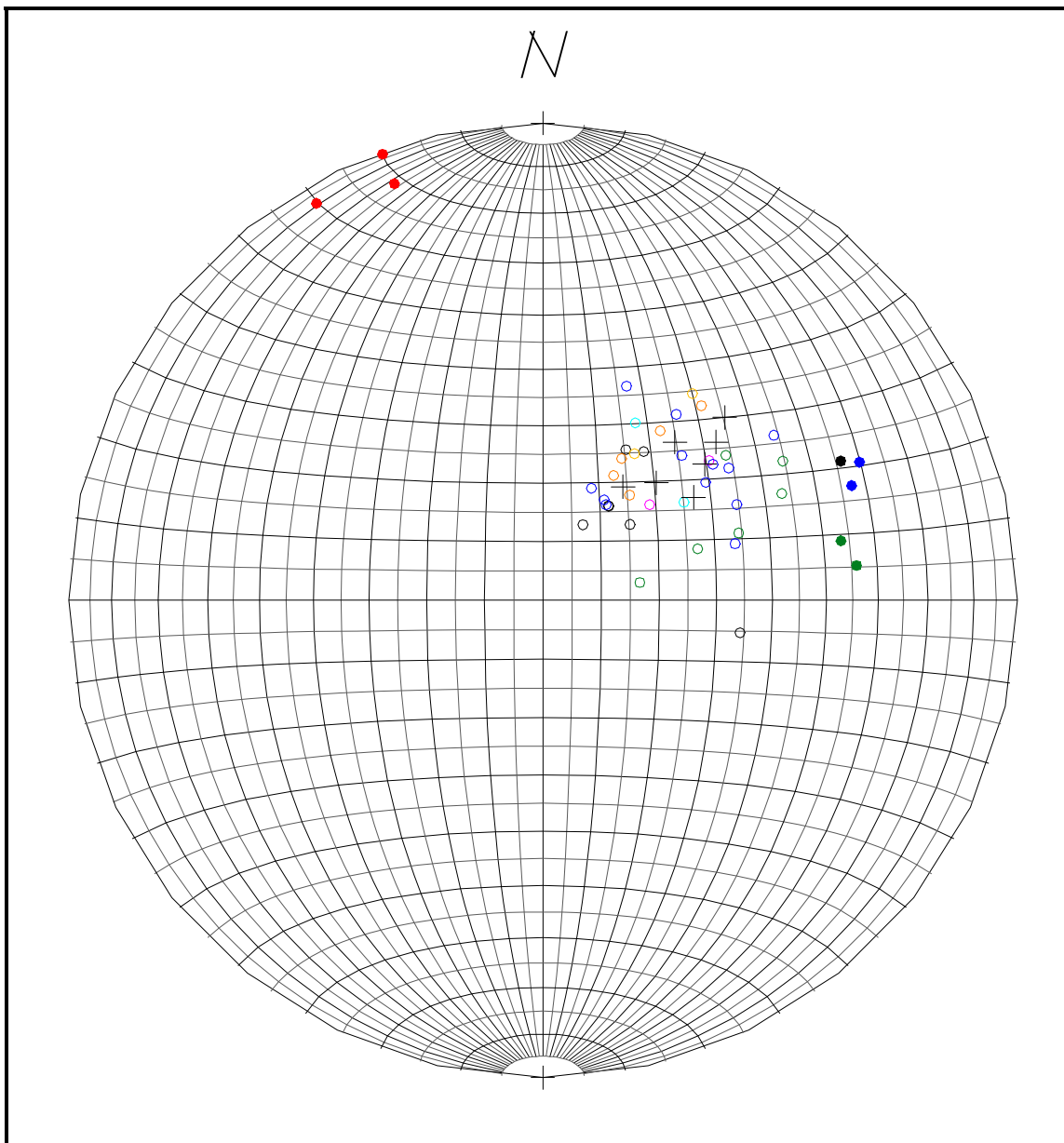
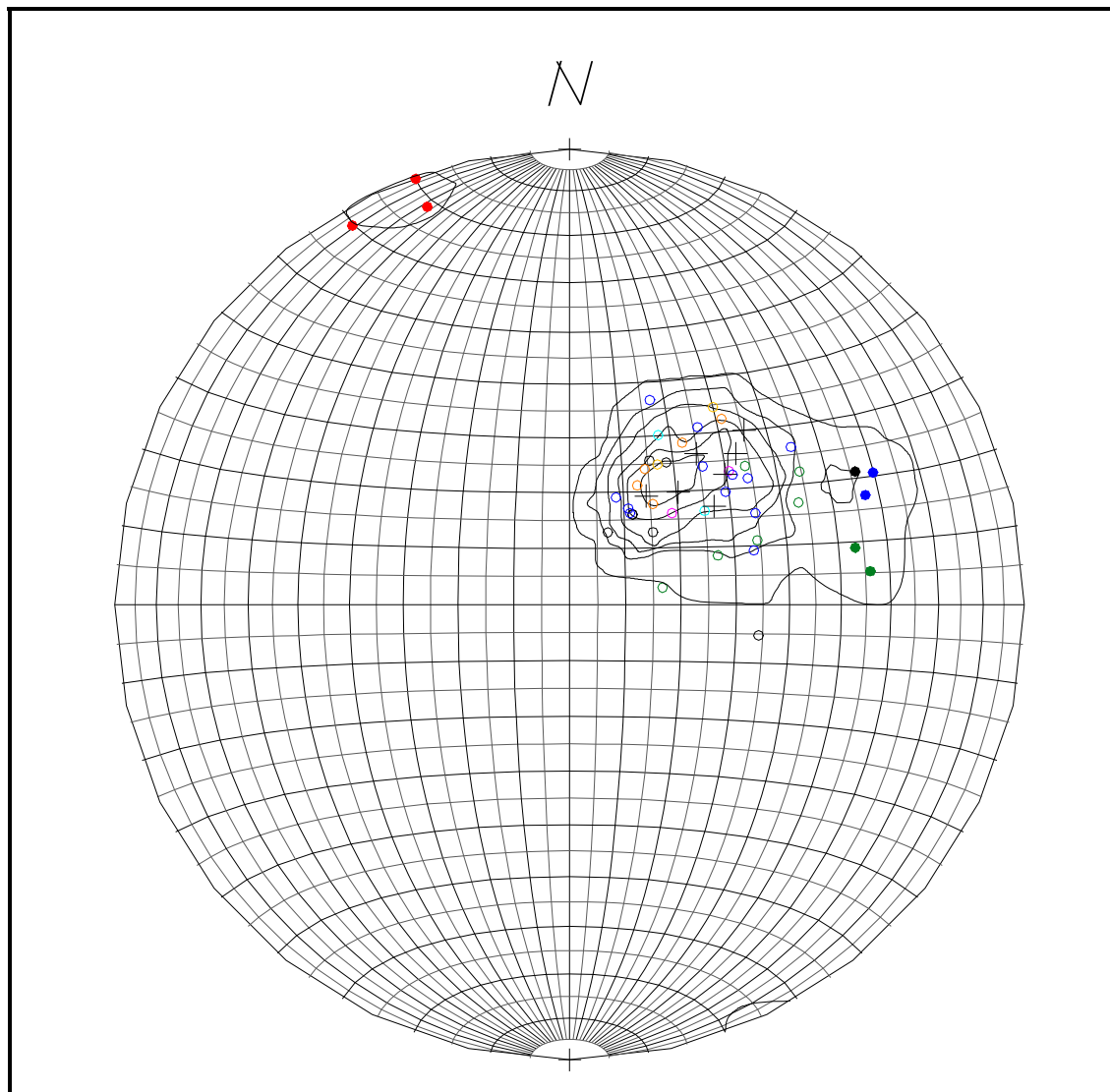


Figure 6. A plot of the structural features observed at 1837 ½ Camino de la Luz. The various symbols are the poles of (normals to) the planar features projected to the lower hemisphere of a Lambert Azimuthal Equal-Area stereonet shown in grey. The magenta circles are bedding attitudes shown on the geologic map in Figure 2. The yellow circles are bedding attitudes from Hoover (1978). The cyan circles are bedding attitudes from Weaver (1978). The red dots represent persistent fractures cutting the Monterey strata. Black circles are bedding attitudes measured by the writer in the geological inspection trench dug on the subject parcel. Orange circles and black crosses are bedding attitudes measured by the writer in the coastal bluff face and the wave-cut terrace at the subject parcel. Green circles are bedding attitudes measured by Smith in the bluff face. The green dots are bedding attitudes measured by Smith east of Lighthouse Creek. Blue circles are bedding attitudes measured by CFG. Blue dots represent bedding attitudes measured by CFG east of Lighthouse Creek. A single black dot represents an attitude measured by the writer east of Lighthouse Creek. The solid dots are attitudes of Monterey strata lying east of an angular unconformity at Lighthouse Creek.



**Figure 7. Stereonet plot of the contoured frequency of occurrence of bedding poles and fracture attitude poles in the coastal area of 1837 ½ Camino de la Luz. The plot shows a cluster of fracture attitudes (upper left) and of the attitudes of bedding. The bedding cluster shows two sub-clusters, the larger west of Lighthouse Creek and a smaller one east of the creek. The mean attitude of most of the bedding poles is about 46° azimuth and plunges about 53°. This corresponds to a mean strike of N 44° W and mean dip of 34° SW. The mean attitude of the fractures is about N 67° E strike and 78° SE dip.**

The unit weight of the rocks likely to be involved in sliding at the subject parcel was calculated by measuring the widths of individual marl beds over a fixed lateral distance across the outcrop shown in the photo in Figure 3. The marl comprised 36.7% of the width. A weighted average of marl with a unit weight of 120 pcf and claystone with a unit weight of 58 pcf yielded an average weight of 81 pcf for the combined Monterey lithologies.

The kinds of slope failure likely to affect coastal bluffs consist of planar failure down a single bedding plane, a wedge type of failure on two intersecting planes, usually a

bedding plane and a fracture, and toppling failure of nearly vertical beds or jointed slabs of bedrock. Where only unconsolidated sediments or highly fractured rock form a coastal bluff, a circular failure can occur. All of these types occur in the Santa Barbara County coastal bluffs. The representations of these modes of failure are illustrated in Figure 8.

An examination of the top of the bluff at the subject parcel for tension fractures revealed only a few shallow cracks at the SE corner of the paved area. It is likely that these are the result of soil creep in the unconsolidated stratum underlying the paving. Tension fractures were not considered in the slope stability analyses of the coastal bluff inasmuch as no tension cracks appeared to affect the underlying Monterey strata anywhere on the subject parcel.

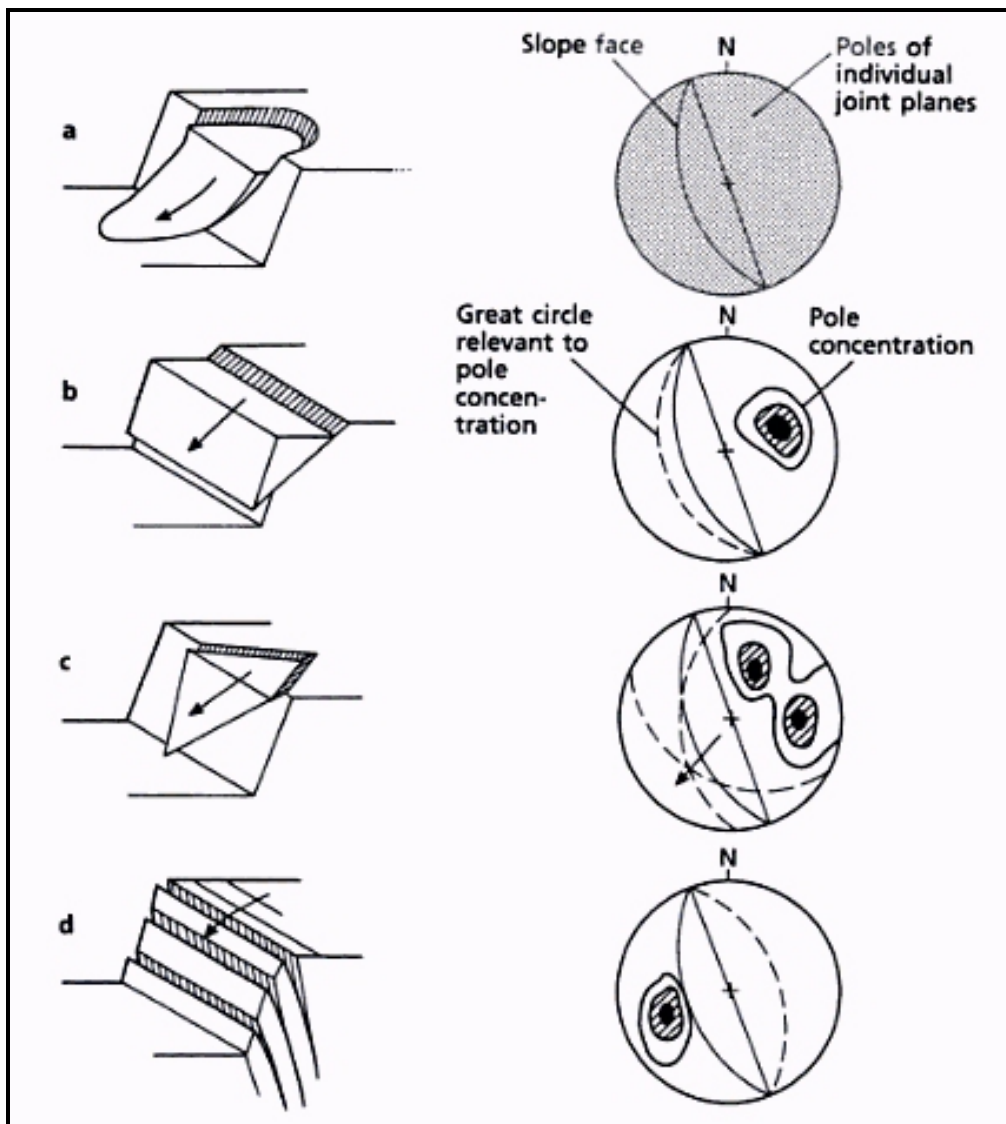


Figure 8. Diagrammatic representation of the modes of failure of a coastal bluff after Hoek & Bray 1981. The stereonet representation for each mode is also shown on the right side of the figure. 8a is a circular failure, 8b is a planar failure, 8c is a wedge failure, and 8d is a toppling failure.

### PLANE FAILURE<sup>3</sup>

For sliding to occur on a single plane in a bluff, that plane must strike parallel or nearly parallel to the trend of the bluff. The dip of the failure plane must be smaller than the dip of the bluff face. Further, the dip of the failure plane must be greater than the angle of friction of this plane. Release surfaces which provide negligible resistance to sliding must be present in the rock mass to define the lateral boundaries of the slide. Such surfaces could be faults, fracture zones or declivities such as stream reentrants. Planar failure can occur on a plane passing through the convex promontory of a bluff because no lateral constraints are present there.

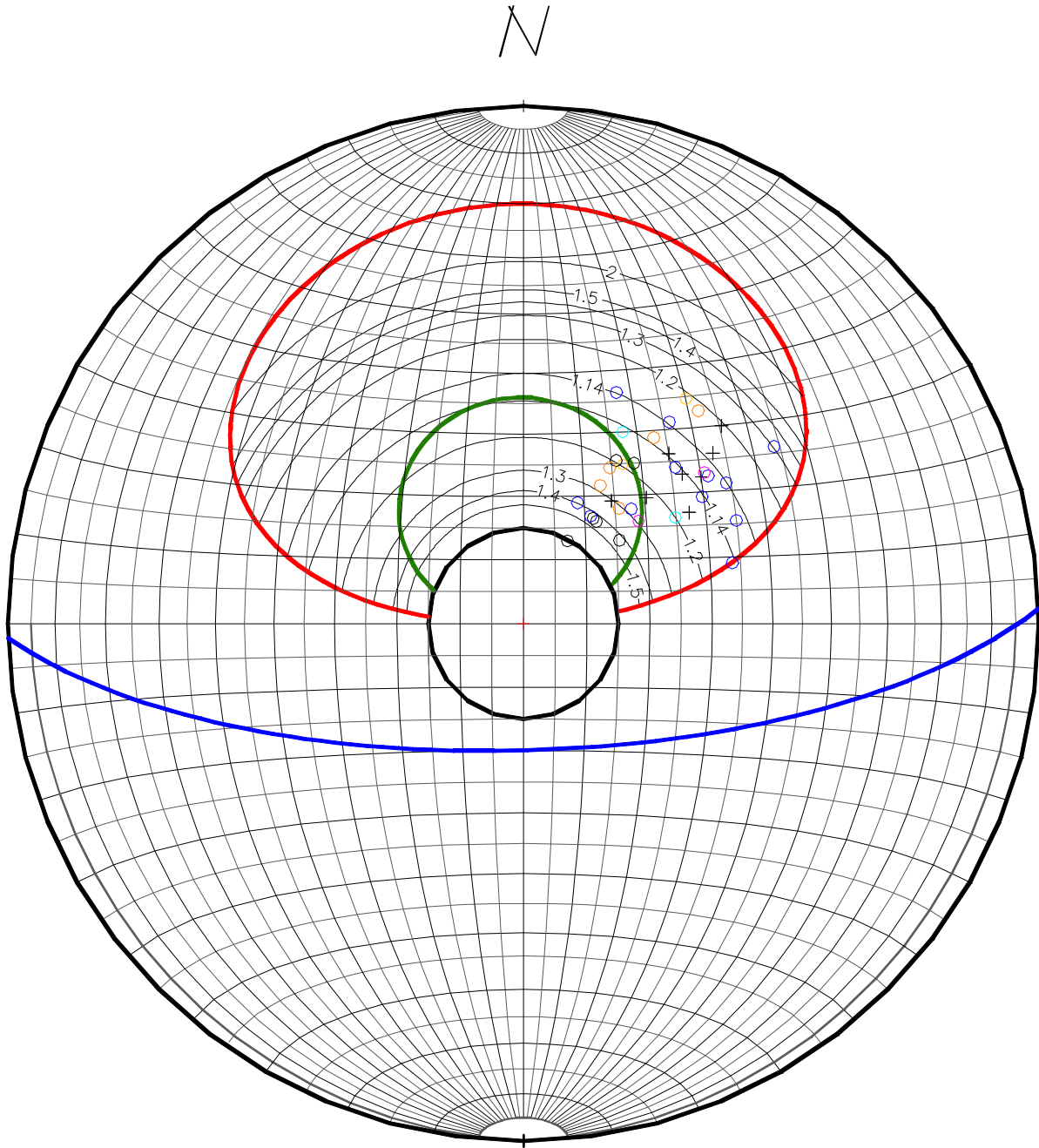
Large scale asperities such as small folds and syngenetic slumping features tend to impede planar movement and so are not amenable to conventional stability analysis. Asperities noted in the bluff and wave-cut terrace at the subject parcel were of this type (see Figure 12). They are not considered further inasmuch as they impart considerable stability to the bluff by requiring dilatancy of the entire bluff and shearing of the Monterey marl before movement down the dip of these strata can start. Omitting consideration of such asperities adds conservatism to the analysis of plane failure.

The angle of internal friction of the claystone seam in the Monterey strata examined in the inspection trench was measured to be 15°. A cone with this apical angle was plotted as a black circle on the lower hemisphere of a Lambert Equal area projection in Figure 9. The kinematic envelopes of bedding poles capable of slope failure are plotted on the stereonet in Figure 9 as closed figures. The figure having a green color represents the upper slope of the bluff face and the figure colored red represents the lower, steeper face. The kinematic analysis shows that most of the bedding planes have poles falling within these figures and outside the circle of internal friction angle and so plane failure is not prevented by stereotaxis – all measured strata have dip components down the face of the bluff.

The likelihood of planar failure was evaluated by performing a limit equilibrium analysis of the bedding planes shown to be capable of failure by kinematic analysis. The equation for the factor of safety was modified to apply to a compound sloped bluff (see Figure 5) and then applied to calculate the factor of safety at a 5° graticule of points inside the envelopes shown on the stereonet plot in Figure 9. The input to the limit equilibrium analysis is listed in the following table.

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<sup>3</sup> After Hoek & Bray 1981



**Figure 9. Stereonet plot of bedding plane poles showing the limit of feasibility of planar failure determined by kinematic analysis. The blue arc represents the plane of the face of the coastal bluff at the subject parcel. The central heavy black line is the cone of the angle of internal friction on the claystone seams in the Monterey beds. Poles of beds lying inside this circle cannot fail. The heavy green and red lines demarcate the envelope of poles that are capable of failure. The red line is for beds cropping out on the lower slope of the bluff; the green line is for beds cropping out on the upper slope. The light black contour lines represent the factor of safety of all attitudes with poles within the feasible failure envelope. The contours represent the safety factors of the slope under building load during a seismic event. The poles of bedding and fractures are as described on Figure 6.**



## PLANE FAILURE ANALYSIS INPUT

Bedding	Strike	N 44° W
	Dip	34° SW
	Friction Angle	15°
	Cohesion	600 psf
Bluff Face	Upper Slope Strike	N 88° E
	Upper Slope Inclination	36° S
	Lower Slope Strike	N 88° E
	Lower Slope Inclination	70° S
Weights	Average Unit Weight of Rock	81 pcf
	Unit Weight of Water	62.4 pcf
	Building Load Intensity	50 psf
	Seismic Coefficient	0.15

The limit equilibrium equation governing plane failure was modified to allow surcharge loads from a building placed on the top of the coastal bluff at the subject property. A load intensity of 50 psf (20% larger than that recommended by the Uniform Building Code) was applied to a unit width strip having a footprint length of 50 ft, the maximum allowable on the subject parcel's building envelope. The plane failure analysis was performed with the condition of this building surcharge.

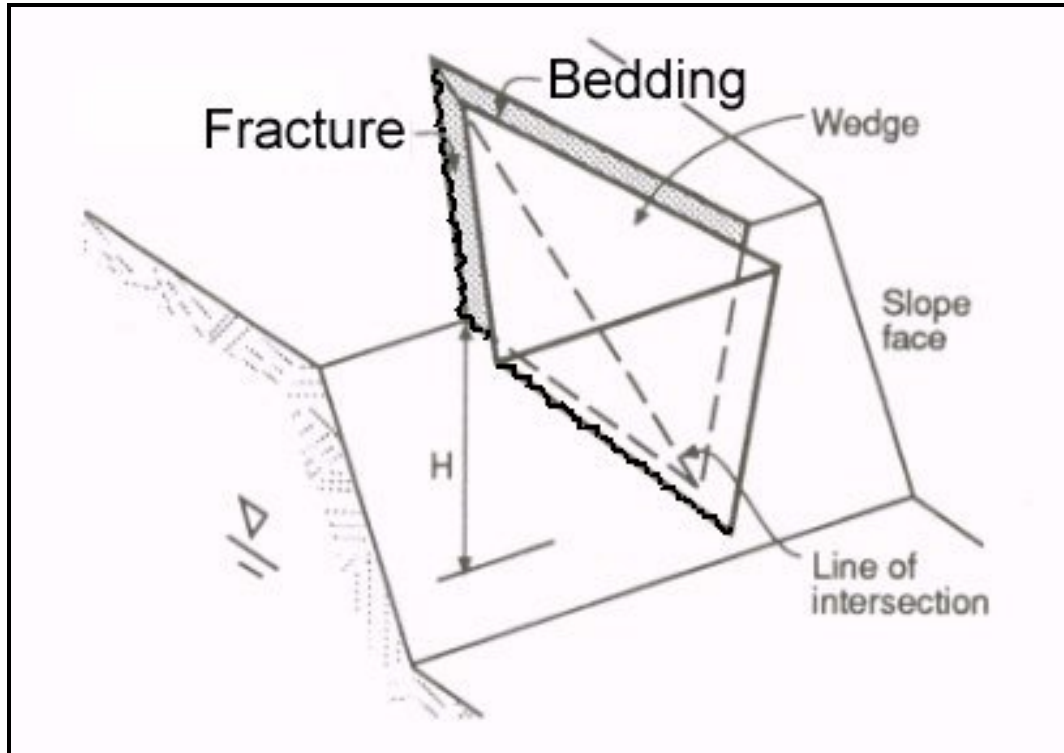
In addition, a pseudo-static analysis of the slope of the coastal bluff at the subject parcel was performed to examine the stability of the burdened slope during a seismic event. The analysis consisted of the imposition of a force to the failure mass equal to 15% of the combined weight of the failure mass and building surcharge. The black contours on the stereonet in Figure 9 indicate the factors of safety obtained from this analysis.

All of the attitudes of strata cropping out of the coastal bluff that have poles plotted inside the kinematic envelope on Figure 9 have factors of safety of 1.14 or greater. A factor of safety greater than 1.1 is considered to represent stability under seismic conditions. Most of the strata attitudes measured in the area of study have factors of safety exceeding 1.2 for the existing slope. This indicates that the bluff laden with the largest building conceivable for the site is stable under conditions for planar failure even during a seismic event. The factors of safety for static conditions are not presented in Figure 9 owing to the indicated stability under a severe seismic event.

## WEDGE FAILURE

A wedge type failure is feasible where two discontinuities in the substrate intersect in such a way that they form a surface down which sliding can occur. A wedge failure is diagrammed in Figure 10. Actually, a plane failure is a degenerate form of wedge failure where both planes of discontinuity have the same strike, dip, and strength characteristics.

The writer has examined most of the coastal bluffs of Santa Barbara County. Several of the slides noted in these bluffs were of the wedge type. The ancient slide in the SE corner of the subject parcel, the Camino de la Luz slide, the recent Shoreline Park slide and other sites in the Santa Barbara County coastal area appear to be of the wedge type. An example of such a wedge failure in the Shoreline Park area is shown in Figure 11. The ancient slide (Figure 11) seems to be the kind of a wedge slide that is kinematically possible at the subject parcel. Figure 12 shows the fracture that formed the west side of the wedge-type slide at the SE corner of the subject parcel.



**Figure 10. Isometric diagram of a wedge-type failure on a bluff face. H represents the height of the wedge. The water table is shown as being just above sea level. In the case at 1837½ Camino de la Luz the wedge would be formed from the intersection of the bedding plane of a stratum in the Monterey formation with a fracture across the bedding of the Monterey strata. In certain cases a lateral tension fracture parallel to the verge of the bluff occurs near the upper limit of the wedge. The tension fracture acts as a lateral release surface for a wedge failure.**



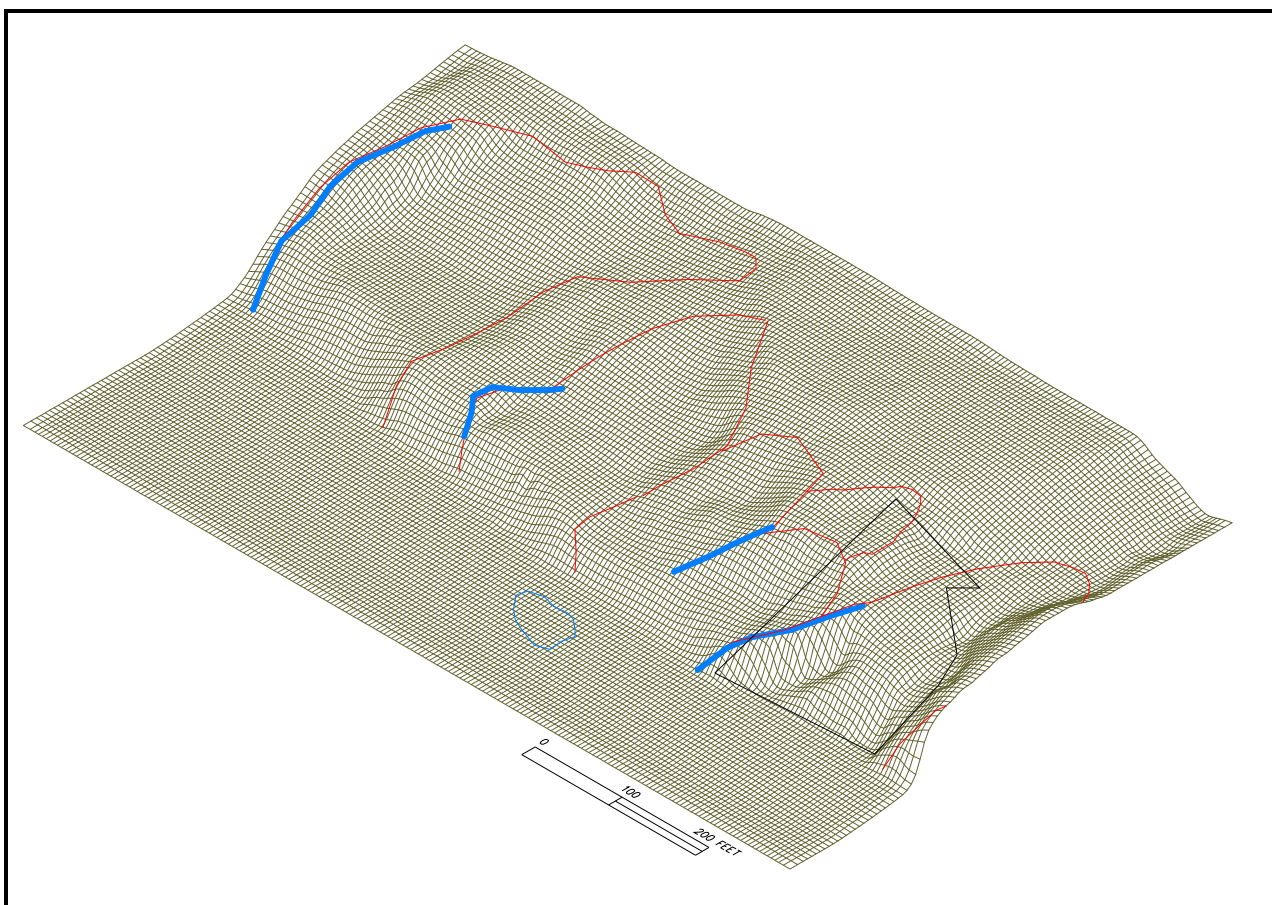
**Figure 11. Photograph of an ancient wedge-type slope failure just west of the steps at Shoreline Park. The plane on the right is a dip face on Monterey strata. The plane on the left is a fracture surface. Most of the failed block has been removed by marine erosion.**



**Figure 12. Monterey strata exposed in the bluff at the subject parcel. View is toward the NW. The failure plane is delimited in red. The white ledge in the landslide block detached from the layer seen at the left side of the scene. An asperity in the form of a small fold can be seen in the strata exposed by the failure plane. (Photo by the writer, 10 March 2005)**

The Camino de la Luz slide is depicted in Figure 13. It appears to have involved several smaller wedge slides. Small ancient slides seem to be involved as well. The ancient slide at the subject parcel is the rightmost one. Steep bluffs (seen as blue lines in Figure 13) are probably caused by fractures on the west side of individual wedges. The fracture just west of the subject parcel provides the potential for a wedge slide involving the subject parcel.

The landslide scar at the left side of the view in Figure 12 attests to the occurrence of a wedge failure there in the past. The field examination of the bluff suggests that a fracture exists to the west of the subject parcel, but that fracture does not appear to extend northward across the subject parcel inasmuch as such a fracture was not observed in the geologic exploration trench. The fracture dips steeply enough to act as a potential western release plane for a plane failure as well as acting as part of a large wedge failure.



**Figure 13. Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the NW. The subject parcel boundary is shown by the black outline in the lower right corner of the scene. The lowest plane represents sea level. North is parallel to the short axis of the lower plane. The mesh size is 5 feet. The landslide features shown includes those of the Camino de la Luz landslide of 14 February 1978 which lies west of the zone of interrupted bedding is indicated by the closed blue figure on the beach. The red lines outline individual landslide scars. The heavy blue lines represent steep bluffs that might be fracture planes.**



The east side of a wedge slide would be formed by a bedding plane having low shear strength. The bedding plane that crops out at the lowest elevation would be under the maximum stress caused by the weight of the overlying wedge block. The orientation of the Monterey formation bedding plane most likely to meet these requirements is shown by the heavy blue line in Figure 4. A potential wedge failure exists between the heavy blue line and the heavy red fracture line west of it. This fracture does not appear to extend across the building envelope; it was not observed in the geologic inspection trench on the subject parcel. Further, there is no surface expression of the fracture on the subject parcel. Slight soil creep was observed at the SE corner of the building envelope, but no tension fracture release surface appears to transect the top of the wedge.

Wedge blocks formed by bedding planes at higher elevations would have decreased weight and would have a decreased tendency for failure. Such wedges would include masses on the lower parts of the subject parcel.

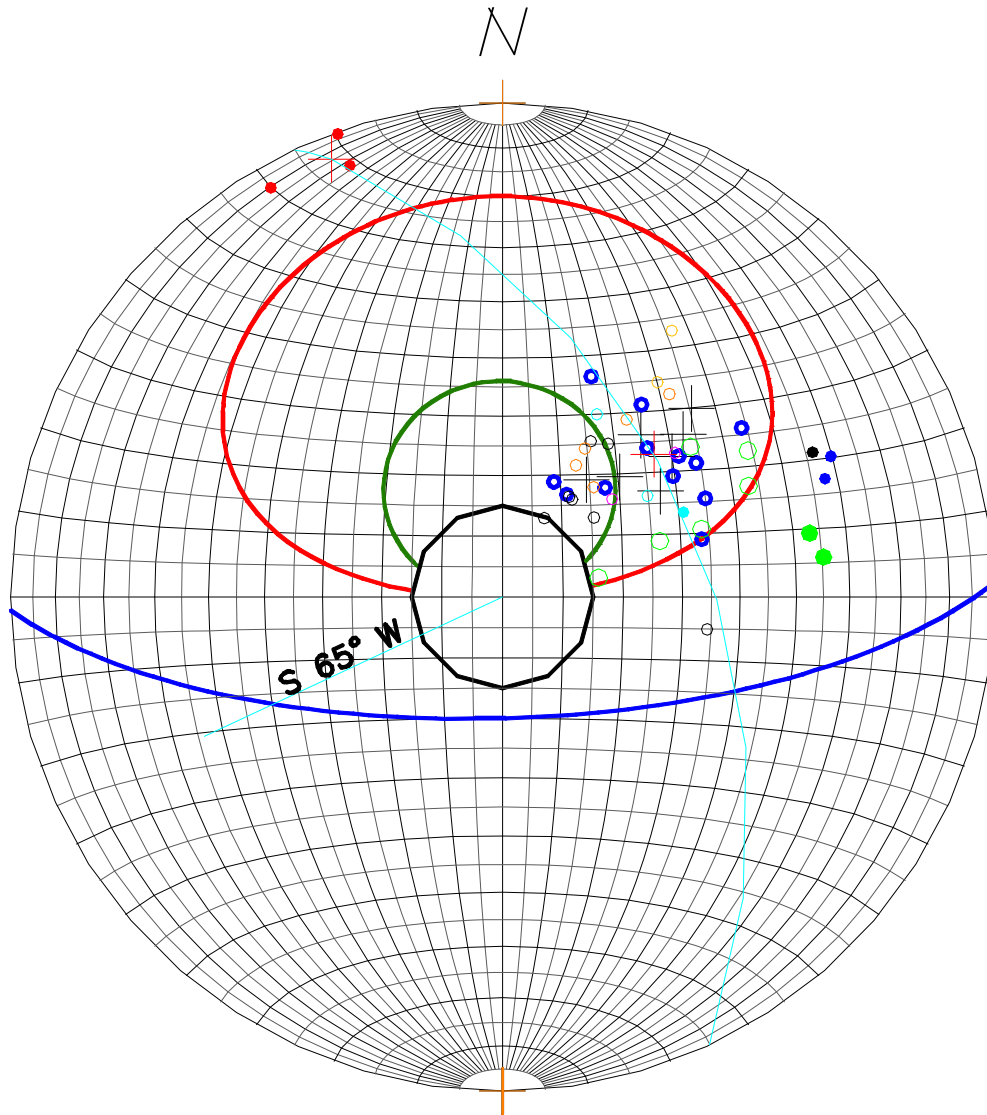
Figure 13 shows the slide scar and a bluff just west of the subject parcel. A zone of interrupted bedding can be seen on the beach at the location indicated by the closed blue line in Figure 13 and indicated on Figure 14. It is quite possible that this zone is a seaward extension of the fracture indicated by the bluff just west of the subject parcel.



**Figure 14. Photo looking SW from the subject parcel at low tide. The zone of interrupted Monterey beds indicated on the map in Figure 4 and on Figure 13 is shown. The zone and the beach to the west are strewn with cobbles and boulders washed from the debris of the landslide of February 1978. Photo by the writer on 9 January 2008 at 3:47 PM. Tide stage is approximately -0.9 ft MLLW.**



The kinematic analysis for a wedge failure is shown in Figure 15. The average attitudes of the fractures measured in the field and of the bedding measured by several workers are indicated by the red crosses. The pole for the plunge of the line of intersection between average Monterey strata bedding and a fracture having the average attitude is seen to lie within the failure envelope for the lower slope of the coastal bluff and so wedge failure could occur if static conditions permit it.



**Figure 15. Stereonet plot of the poles of intersection of bedding and fractures for the kinematic analysis of wedge type failure at 1837½ Camino de la Luz. The cyan arc represents a plane containing the average poles for both fractures and bedding which are indicated by the red crosses. That plane also contains the pole to the plunge of the line of intersection of the bedding and fracture. The line of intersection is shown as a cyan line and its pole is indicated by a cyan dot. The azimuth of the line of intersection is 245° and its plunge is 32°.**

The azimuth of the line of intersection of the failure wedge determined by kinematic analysis is 245°, the general direction of failure of the slide in the SE corner of the subject parcel (see Figure 4). This suggests that the landslide there was a wedge failure.

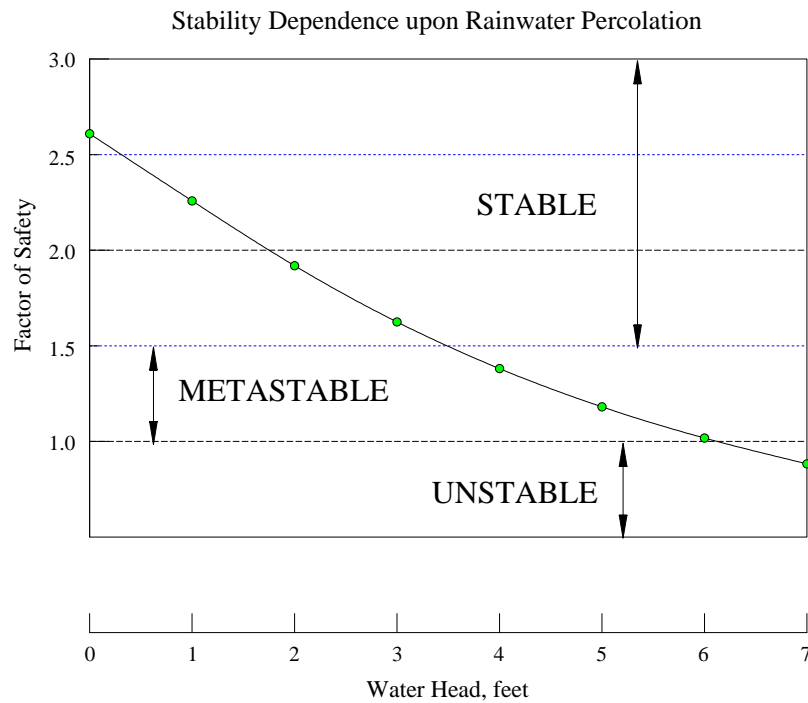
A series of safety factor determinations was made using a wedge failure analysis program by Dr. E. Bane Kroeger of the University of Alaska. The measured friction angle and cohesion of the bedding used in the wedge failure analysis was the same as that used in the plane failure analysis. The strength properties of the fracture plane were assumed to be minimal; a friction angle of 15° and no cohesion. These values are probably low, but were used in the interest of providing conservative results.

The program permitted the use of a building surcharge to be added to the weight of the failing wedge. A building surcharge of 100000 lbs (2000 ft² footprint x 50 psf loading rate) was used to include all conceivable building plans for the site. The input values for these determinations are presented in the following table.

### **WEDGE FAILURE ANALYSIS INPUT**

Bedding	Strike	N 44° W
	Dip	34° SW
	Friction Angle	15°
	Cohesion	600 psf
Fracture	Strike	N 67° E
	Dip	78° SE
	Friction Angle	15°
	Cohesion	0 psf
Bluff Face	Upper Slope Strike	N 88° E
	Upper Slope Inclination	36° S
	Lower Slope Strike	N 88° E
	Lower Slope Inclination	70° S
Weights	Average Unit Weight of Rock	81 pcf
	Unit Weight of Water	62.4 pcf
	Building Load	100000 lbs

The analyses were repeated with increased water head acting on a potential failure plane assumed to represent the degree of saturation of the strata by winter rains. The results of the analyses are given in Figure 16 and in the table following:



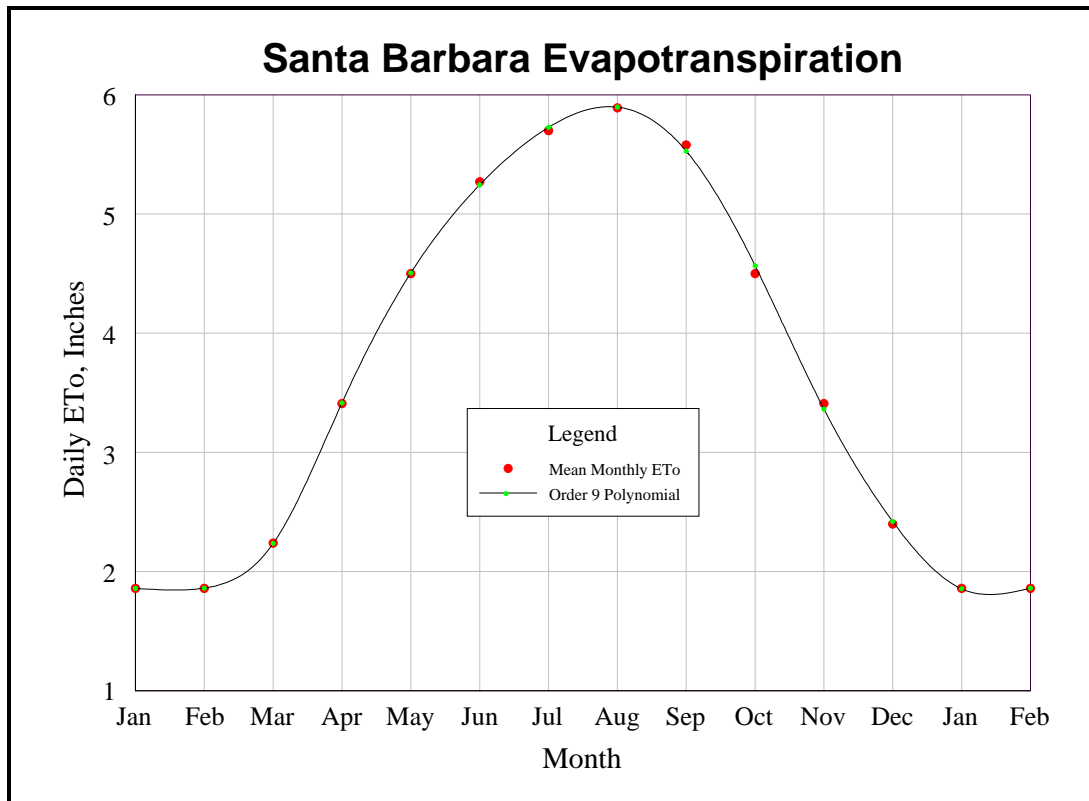
**Figure 16. Stability vs groundwater pressure (head).**

WATER HEAD, ft.	FACTOR OF SAFETY
0	2.609
1	2.258
2	1.919
3	1.625
4	1.381
5	1.181
6	1.018
7	0.883

It is evident that the stability of the bluff is more sensitive to the amount of water permeating the strata than to the size of the building surcharge load imposed. The possibility of wedge failure is related to the position of the piezometric surface (water table) which is, in turn, determined by the rainfall, evapotranspiration and the hydraulic conductivity of the substrate.

Evapotranspiration varies on an annual basis as shown in Figure 17. It is minimal during the season of winter rains. Rainfall infiltration is related to the rainstorm duration and intensity. Rainwater infiltrates into the substrate at a rate dependent upon the hydraulic conductivity of the substrate, the amount of antecedent moisture in the substrate and the intensity of the rainfall. The hydraulic conductivity is virtually fixed. If rainfall is light,

the infiltration proceeds at the rate of precipitation. The infiltration during a storm is at a maximum initially, followed by a transient decay to a steady rate. The transient behavior decays away after a few hours of moderate to heavy rainfall and the rate of infiltration of rainwater is constant. An excess of the rainfall rate over the infiltration rate is represented by the rate of overland flow.

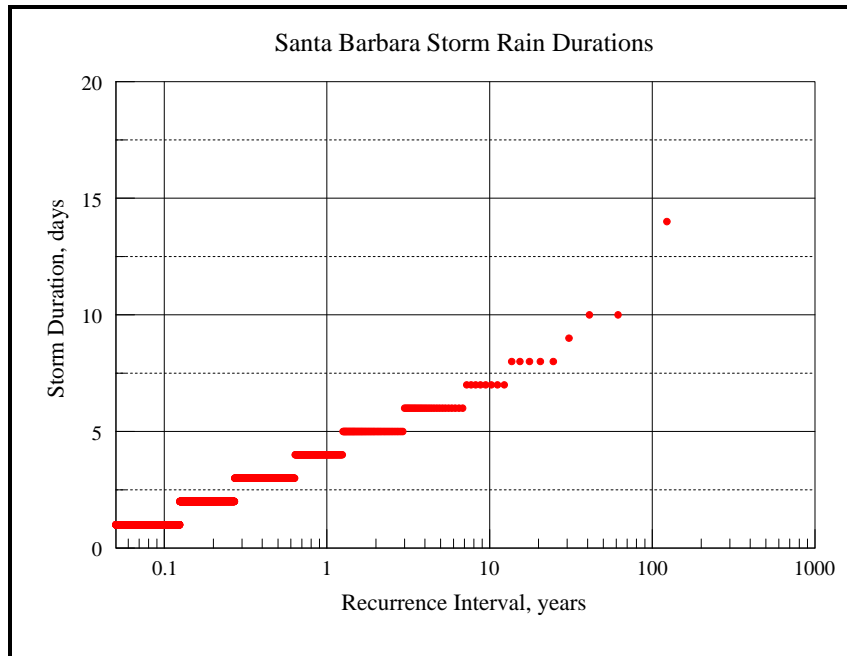


**Figure 17. Evapotranspiration signature for average conditions in Santa Barbara.**

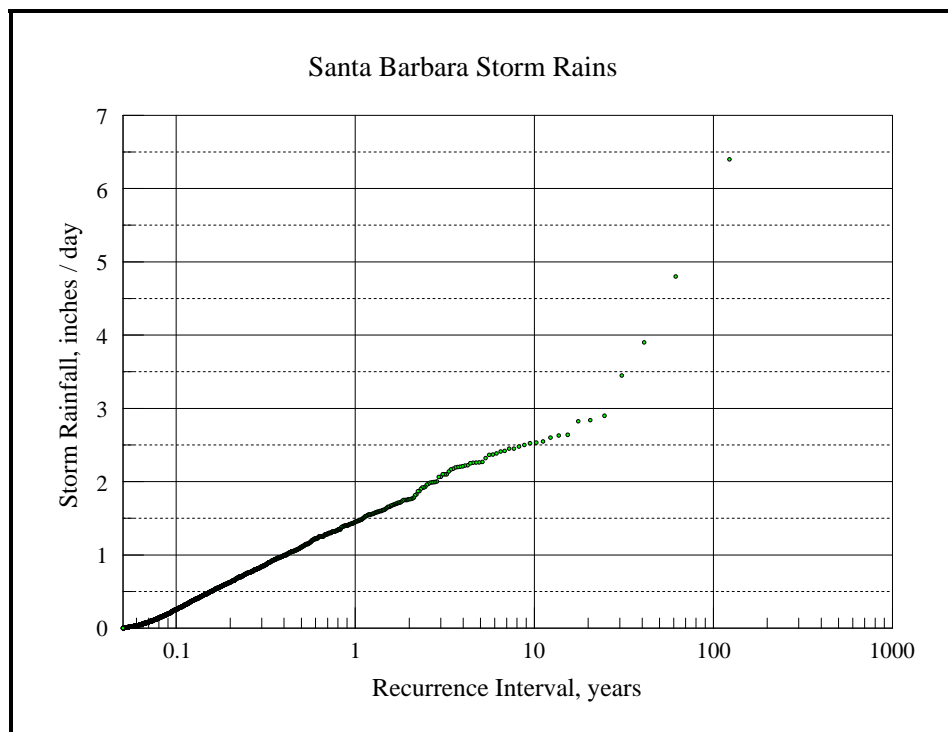
In effect, the amount of rainwater infiltrating is proportional to the duration of the rainstorm. The probability of incidence of rainfalls of a given duration determines the probability of increase in the position of the piezometric surface. The distribution of storm durations was extracted from a 122-year record of rainfall in Santa Barbara. The durations are taken to represent the magnitude of infiltration; the transient behavior is neglected as being negligible in the case of moderate to severe storms and non-existent in the case of light rains.

The probability of occurrence of duration magnitudes is shown in Figure 18. The population of severe storms is seen to be different from modal rainfalls as indicated by the break in slope on Figures 18 and 19. Daily rainfalls shown in Figure 20 follow the same pattern. Both figures show that the events with recurrence intervals exceeding about 30 years come from a different population than do the more ordinary events. It is apparent that storms of long duration have recurrence intervals in excess of 30 years.

It is assumed that the probability of wedge failure follows the pattern of the recurrence intervals of storm durations. In such a case the risk of wedge failure at the subject parcel is minimal because the recurrence interval of severe rainstorms is on the order of 30 years or more.



**Figure 18. Recurrence intervals of Santa Barbara rainstorm durations. The line segmentation is a result of the evaluation of the durations as integral days. Note the change in slope at 30 years. The 100-year storm duration is 12½ days.**



**Figure 19. Recurrence intervals of Santa Barbara rain intensities. The population of the severe storms starts beyond about 30 years. Note that a 100-year storm produces 6 inches of precipitation.**



The amount of rain water that infiltrates and adds to the groundwater and in so doing, raises the water table is small. A rough rule of thumb states that about 25% of rainwater runoff (which is taken to be 19% of precipitation<sup>4</sup>) reaches the water table. This is in agreement with the findings of Crippen (1965)<sup>5</sup>. The 100-year storm event would be expected to deliver only about 4 inches of water to the water table. So it is seen that although the probability of a rainfall of long duration is significant on a 100 year scale, the actual amount of water added by such a storm to that stored below the water table is rather small. An estimate based upon the annual average of precipitation at the subject parcel (about 18 inches) indicates that about 5 in is stored annually on average).

Lighthouse Creek just east of the subject parcel appears to be a historically intermittent stream<sup>6</sup>. It is likely that the stream derives some of its winter base flow from the area under the region of the subject parcel. This base flow represents a discharge from the water stored below the water table and therefore should be subtracted from the estimate of the elevation of the water table by infiltrated rainwater. The lack of seeps in the bluff face suggests that ground water table elevation is close to the elevation of the bluff toe.

The Camino de la Luz landslide of 14 February 1978 was attributed to saturation of the substrate (Weaver 1978). It was thought that excessive uncontrolled runoff with consequent infiltration into a pre-existing slide mass, added to heavy rain infiltration was the primary cause of the failure. The incidence of rain preceding the landslide is shown in Figure 20. The evidence of this landslide supports the conjecture that ground water pressure induced by the excessive infiltration leads to the possibility of the wedge failures which appear to have occurred in this slide. It is important to note that the present analysis indicates that the storm rainfall alone probably was not the sole cause of the landslide.

The conditions at the subject parcel are different from those at the site of the Camino de la Luz landslide of 14 February 1978. A pre-existing slide mass failed at that site. The substrate at the subject parcel is intact marl strata of the Monterey formation. The slope stability analysis for wedge failure indicates that the subject parcel is stable. This is supported by the fact that failure did not occur at the subject parcel during the 14 February 1978 event.

The analysis for wedge stability indicates that the position of the piezometric surface could affect stability. The position is affected by rainfall infiltration. Even though the subject parcel is stable under present conditions and extreme storm events are predicted to raise the piezometric surface only a few inches rather than the 3½ feet required to induce instability, controlling runoff and irrigation at the subject parcel should not be neglected.

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<sup>4</sup> This follows data reported by Miller & Rapp (1968)

<sup>5</sup> Figure 11 on page E23 for average precipitation of 18 in/yr.

<sup>6</sup> Geologist David Doerner, personal communication. He lived on 8½ ac bordering Lighthouse Creek in the 1930s.

## CIRCULAR FAILURE

The potential for circular failure is limited to the unconsolidated material overlying the Monterey strata or landslide debris that lacks the cohesion of intact rock. An example of such a landslide on the coastal bluff in Santa Barbara County is shown in Figure 21. This type of failure is not expected to occur at the subject parcel except in the unconsolidated materials overlying the Monterey strata. The unconsolidated materials are only about 7 feet thick so a failure of this sort would be limited to the “kick-out” such as that existing on the top of the bluff immediately west of the subject parcel (See Figure 4).

## TOPPLING OR BUCKLING FAILURE

This kind of failure occurs in rocks having bedding or persistent fractures striking within  $10^\circ$  of the trend of the coastal bluff and dipping nearly vertically (Wyllie & Mah 2004). An example is illustrated in Figure 22. This type of landslide is not expected to occur at the subject parcel. No steeply-dipping discontinuities trending within  $10^\circ$  of the trend of the coastal bluff have been observed at the parcel.

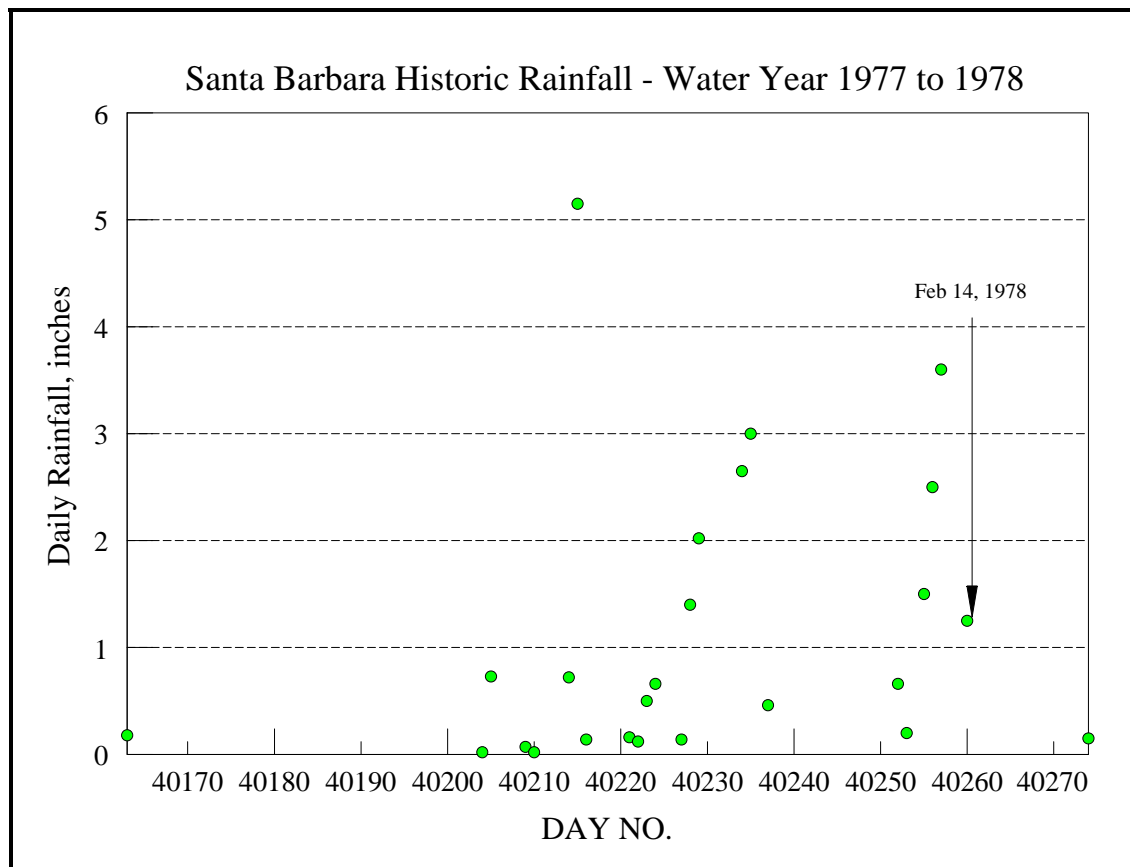
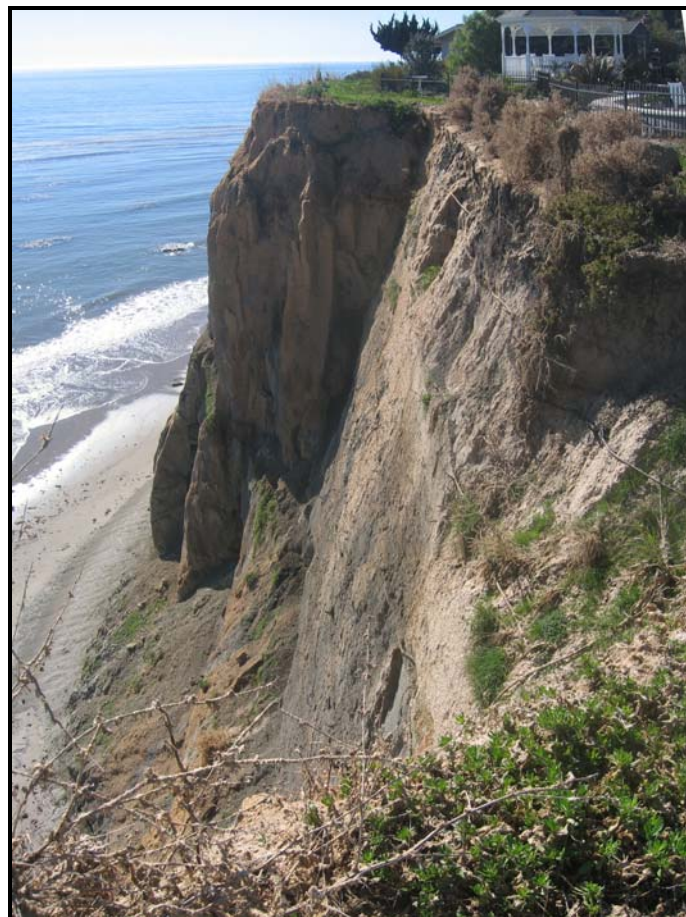


Figure 20. Graph of rainfall preceding the Camino de la Luz landslide. Note the incidence two long-duration sequences of increasingly heavier rainfalls and an extreme single event in the days prior to the landslide.



**Figure21.** Panoramic photo of a circular type landslide on the coastal bluff of Santa Barbara County. The skyline follows the scarp of an ancient landslide. At mid-height up the bluff is the bare scarp of a more recent circular slide of old landslide material. The red Bougainvillea bush and trees suggest the scale of this image.



**Figure 22.** Toppling Failure viewed from the top of a release surface in the coastal bluff in Santa Barbara County. The mudstone has failed along the steeply dipping planar joint in the center of the photo. Two other joints parallel to the failure joint can be seen in the release surface beyond the failure plane.

## MARINE EROSION & LANDSLIDE SETBACK

The method advocated by Johnsson (2003) for calculating a coastal setback considers the rate of marine erosion and the stability of the present coastal bluff. His method of determining the coastal setback consists of deciding upon a project life (75 years in the present case) and applying a rate of bluff retreat to that interval. The stability of the bluff after 75 years of erosion is then estimated by the stability of the present bluff. The setback to the 1.5 factor of safety line is then added to the erosion setback.

The Johnsson (2003) procedure seems to be predicated upon the expectation that all coastal bluff failures occur by circular failure or plane failure. In such cases a line demarking the stable factor of safety line (1.1 in the case of seismic conditions) could be identified and applied to the erosional setback line.

This landslide setback line should be obtained by evaluating the stability of the bluff at the subject parcel with regard to potential wedge failure and not to block sliding or circular failure as implied by Johnsson's method. The direction of wedge failure at the subject parcel is strongly to the southwest (see Figure 15) and not directly seaward. The influence of the wedge failure at the verge of the bluff would be limited to a notch-shaped line rather than a line parallel to the verge such as produced by a tabular failure.

A wedge failure would produce a seaward protuberance in the shoreline. Marine erosion of the wedge would restore the shape and position of the strand to its pre-slide position. However, the height of the wave-caused bluff at the toe would be reduced. This would cause the stability of the failed mass to increase as can be appreciated by examining the diagram in Figure 23. This is the condition that exists in the SE corner of the subject parcel. It would take continued bluff retreat by marine erosion before the failed wedge would become unstable again. That erosion would proceed at the rate determined to have prevailed in the past, 4 inches per year.

It would seem that it would not be necessary to include a landslide setback to the estimate of the 75-yr erosional setback for the subject parcel. Marine erosion will not reach the position of the terrestrial verge of the bluff for about 300 years at the present rate of marine erosion. The factor of safety of the bluff will drop below 1.5 when marine erosion has proceeded 60 ft shoreward and formed a bluff 60 ft high. This would be expected to occur in about 180 years.

These epistemic estimates of landslide occurrence in the bluff at the subject parcel indicate that there is little need for concern in this regard. The aleatory effects are such that a 26% ( $= 1 - (1 - 1/100)^{30}$ ) chance exists that a 100-year rainfall could occur in the next 30 years. Note that this does not mean that a 100-year storm will occur in the next 30 years - one has not occurred for the past 97 or so years. Further, it does not mean that there is a 26% chance of failure of the bluff at the subject parcel. The 100-year event is about 6 inches of rainfall per day. The minimal infiltration from such an event reduces the aleatory effect to negligible.

## **SEA LEVEL RISE AND COASTAL EROSION**

Some concern exists regarding the effect of sea level rise in the future. Estimates of sea level rise have been made using postulated future warming of the ocean and atmosphere. Values presented by the California State Lands Commission as predicted by the California Ocean Protection Council based upon work by Vermeer and Rahmstorf (2009) are used here with the reservation that only tenuous results can be expected from an analysis involving the combined uncertainties of the many causative variables.

The rate of sea level rise is estimated from the expected rate of melting of land-bound glaciers and the ice sheets of Antarctica and Greenland. A small contribution is included as thermal expansion of sea water in response to warming. It appears that no account was made of thermal expansion of the coastal land mass under such warming. Neither was tectonic elevation of this coastal region, renowned for its high rate of tectonic uplift. The remnants of a coastal terrace at about one meter above the present wave-cut terrace existed along the Santa Barbara cliffed shoreline in the 1980s. That one-meter terrace was evidence of relatively recent uplift of this region. There is no reason to suppose that uplift will not continue.

The rate of coastal retreat is assumed to increase by 20% because of sea level rise (Adams & Inman 2009). This means that the effective rate of erosion will be about 5 in/yr rather than the present rate of 4 in/yr. At the future rate the coastal bluff at the subject parcel would become unstable in about 140 years. It is evident that sea level rise would have no deleterious effects upon the stability of the bluff within the next 75 years.

## **CONCLUSIONS**

An analysis of the stability of the coastal bluff at the subject parcel indicates that under conservative estimation of geological and physical conditions, the bluff face is stable. Neglecting the stabilizing effects of asperities in the bedding and fractures, neglecting the effects of lateral release surfaces, ignoring stereotaxis, and utilizing conservative values for the physical parameters of stability while imposing a maximum building surcharge and seismic load failed to produce a result indicating instability.

Both plane failure and wedge failure are kinematically allowed for the subject parcel but the factors of safety indicate stability of the mass involved in such slides. The mass involved in both kinds of failure lies below (S of) the proposed building envelope so slope failure should not be a threat to a structure built there.

The probability of failure is affected by the degree of saturation of the substrate in the masses but the infiltration of rainwater from severe storms (4 in for a 100-yr storm) is not sufficient to create instability. Even so, surface runoff and irrigation must be controlled at the subject parcel.

Marine erosion at the subject parcel is not expected to induce landslides until the bluff reaches a height of 60 ft. Bluff retreat under conditions of future sea level rise would



induce instability in about 140 years, a span of time many times the life of any project at the site. The 75-year setback proposed by Fisher (2001) appears to be appropriate for the subject parcel.

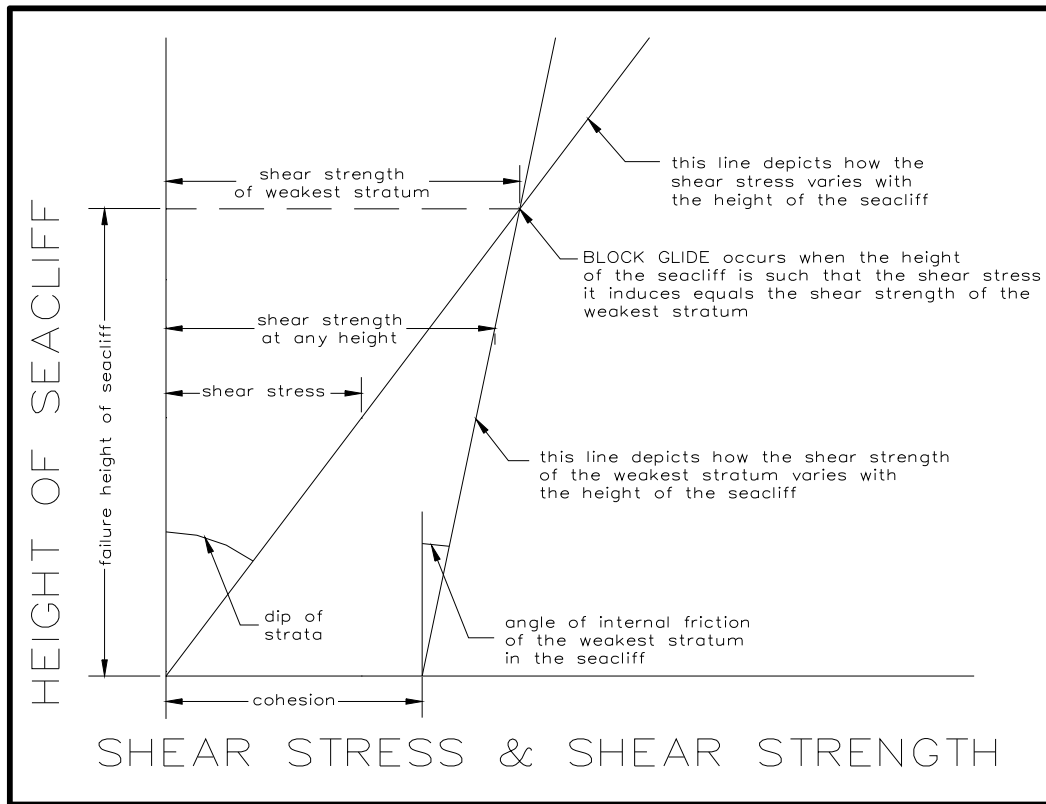


Figure 23. Diagram illustrating the dependence of bluff stability upon the height of the bluff.

I trust that this response is suitable for your purposes. Please contact me if you have any questions or comments.

*William Anikouchine*



William Anikouchine PhD  
Consultant in Earth & Marine Sciences  
Santa Barbara CA

## REFERENCES

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- Smith 1980** - "Feasibility of Site Development 1837 ½ El Camino de la Luz" by R. J. Smith 29 October 1980.

**Vermeer and Rahmstorf 2009** - “Global sea level linked to global temperature”, *Proceedings of the National Academy of Sciences*, Martin Vermeer and Stefan Rahmstorf, 2009

**Weaver (1978)** – “Preliminary Landslide Investigation, Sea Cliff Property, El Camino de la Luz, Santa Barbara, California for City of Santa Barbara” by D. W. Weaver & D. F. Hoffman for Pacific Materials Laboratory 6 March 1978.

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## **APPENDIX**

### **Results of Analyses of Samples Taken From the Exploration Trench**

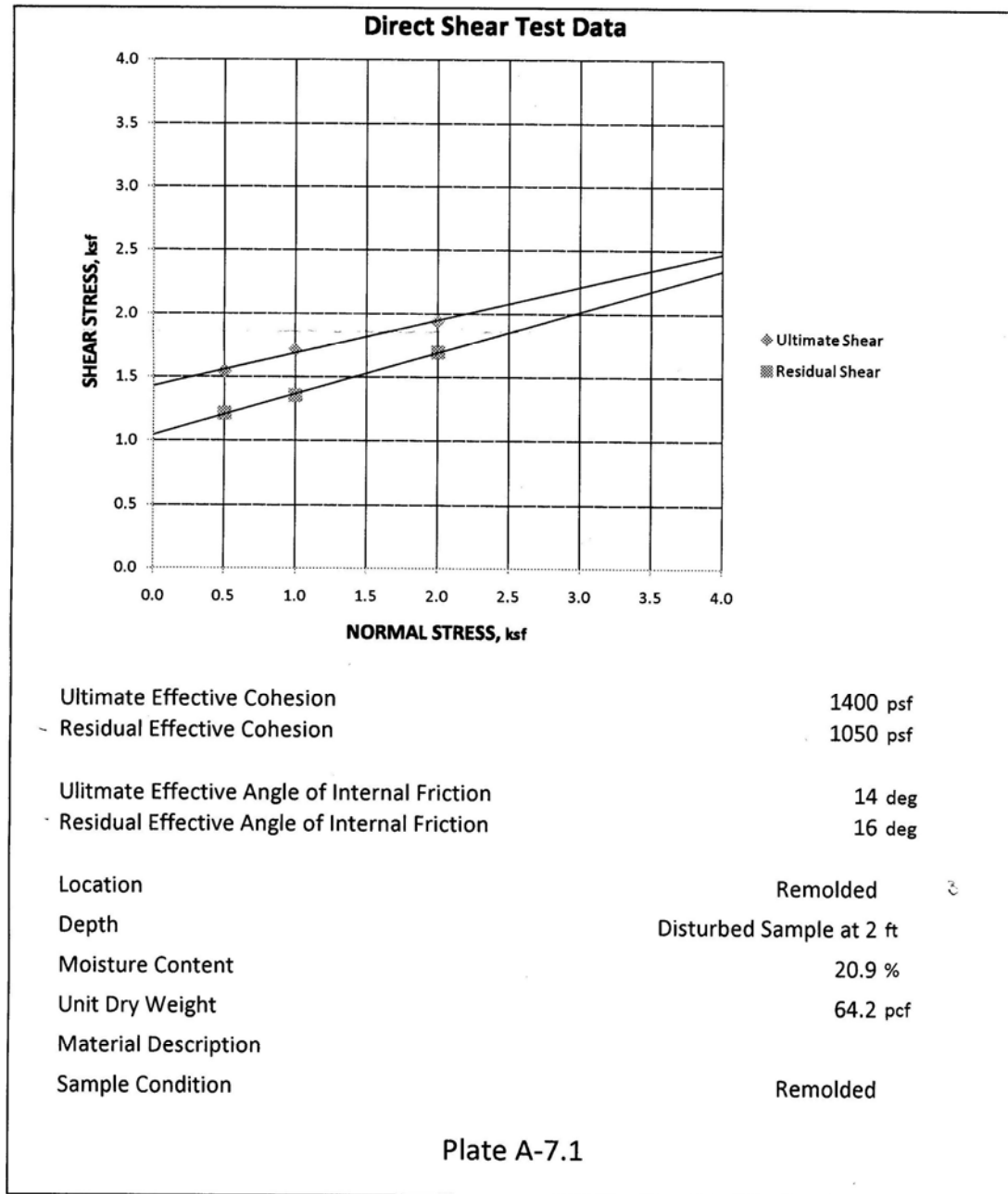


Figure A-1. Results of Shear Test of Sample B-3.

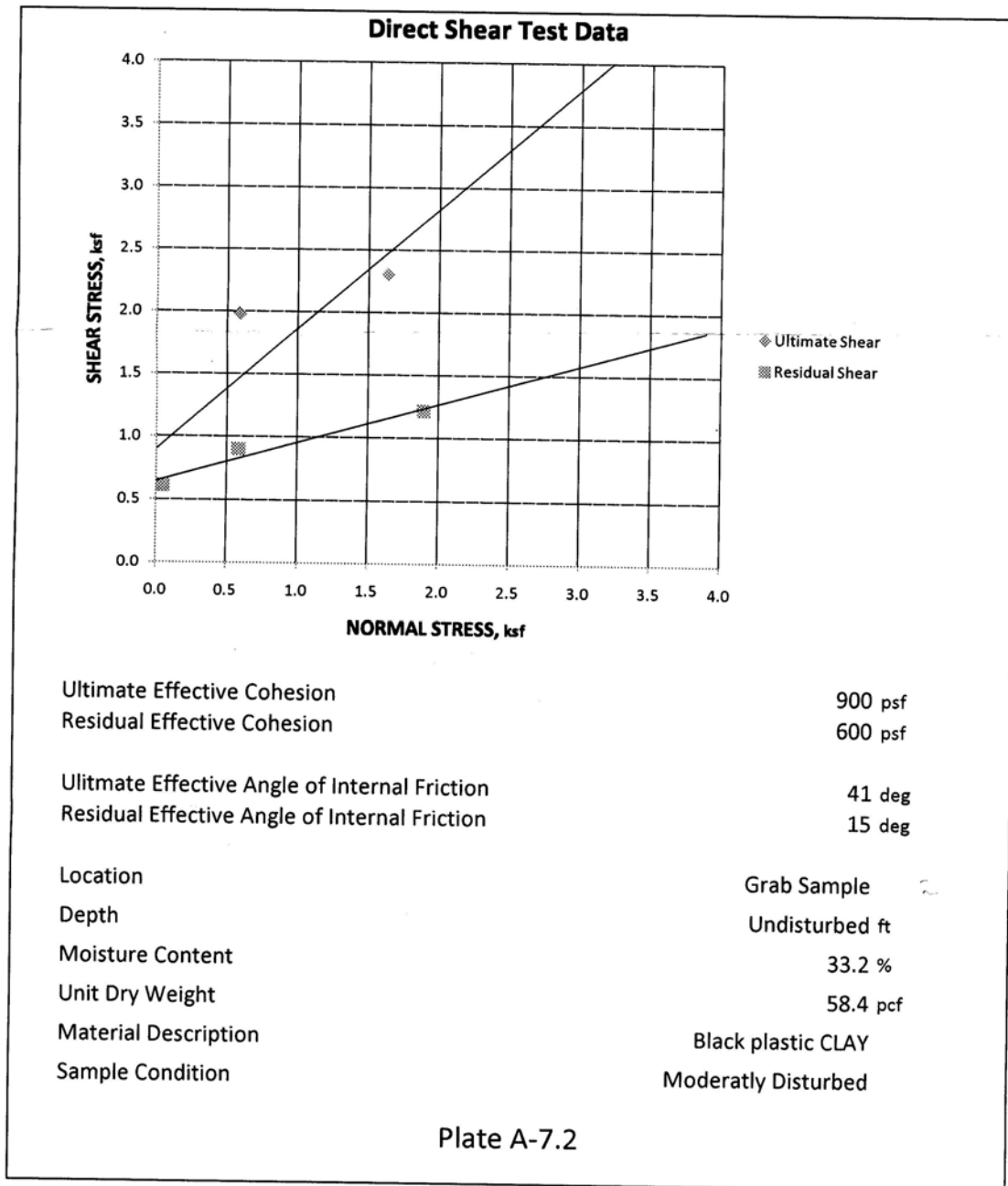


Figure A-2. Results of Shear Test of Sample B-2.



## **Appendix D**

### **2008 Proposed Final EIR Comments and Responses**



## 10.0 FINAL EIR RESPONSES TO COMMENTS

As part of the Final EIR for the 1837½ El Camino de la Luz Residence project, written responses to public comments received during the Draft EIR public review period are provided in this section. In accordance with the requirements of CEQA Guidelines section 15088, responses to review comments are provided only for comments that address the adequacy of the environmental review provided by the Draft EIR.

The review period for the Draft EIR prepared for the 1837½ El Camino de la Luz Residence project extended from November 27, 2006 to January 12, 2007. A list of the agencies and persons that submitted comments on the Draft EIR is provided below. A copy of each comment letter is provided in this section, along with responses to comments that pertain to the environmental review of the proposed project. Responses to comments provided at the January 11, 2007 public hearing on the Draft EIR are also provided.

### WRITTEN COMMENTS

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#### State Agencies

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#### Public

2. Bruce Peterson .....10-7  
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### JANUARY 11, 2007 PUBLIC HEARING COMMENTS

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Joanna Morgan .....10-29  
Peter Miller .....10-30  
Janice Taylor .....10-30  
Brett Daniels .....10-30

### PLANNING COMMISSIONER SEPTEMBER 8, 2005 HEARING

- COMMENTS.....10-31



Arnold Schwarzenegger  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Cynthia Bryant  
Director

January 11, 2007

RECEIVED

JAN 22 2007

CITY OF SANTA BARBARA  
PLANNING DIVISION

Victoria Greene  
City of Santa Barbara  
P.O. Box 1990  
Santa Barbara, CA 93102-1990

Subject: 1837 1/2 El Camino de la Luz Residence  
SCH#: 2005041031

Dear Victoria Greene:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 10, 2007, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

*Terry Roberts*

Terry Roberts  
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044  
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

10-3

Document Details Report  
State Clearinghouse Data Base

SCH# 2005041031  
Project Title 1837 1/2 El Camino de la Luz Residence  
Lead Agency Santa Barbara, City of

Type EIR Draft EIR  
Description The project consists of the construction of a 1,499 sf 2-story single family residence with an attached 443 sf garage, on a 23,885 sf vacant bluff-top lot. Access to the site would be provided by private easements extending south from the end of the paved public road (El Camino de la Luz).

Lead Agency Contact

Name	Victoria Greene	
Agency	City of Santa Barbara	
Phone	(805) 564-5470	Fax
email		
Address	P.O. Box 1990	
City	Santa Barbara	State CA Zip 93102-1990

Project Location

County	Santa Barbara
City	Santa Barbara
Region	
Cross Streets	Oliver Road / Cliff Drive / Meigs Road
Parcel No.	045-100-065
Township	
Range	
Section	
Base	

Proximity to:

Highways	225, 101
Airports	Santa Barbara
Railways	UPRR
Waterways	Lighthouse Creek, Pacific Ocean
Schools	Washington ES, Monroe ES, SB City College
Land Use	Vacant lot / E-3 Zone (Single Family Residential) and SD-3 (Coastal Overlay Zone) / Residential, 5 units per acre

**Project Issues** Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

**Reviewing Agencies** Resources Agency; Regional Water Quality Control Board, Region 3; Department of Parks and Recreation; Native American Heritage Commission; Department of Fish and Game, Region 5; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 5; Caltrans, Division of Aeronautics; Department of Toxic Substances Control

Date Received 11/27/2006 Start of Review 11/27/2006 End of Review 01/10/2007

Note: Blanks in data fields result from insufficient information provided by lead agency.

10-4

**10.1 WRITTEN COMMENTS**

**Comment Letter No. 1**  
**California Office of Planning and Research**  
**Date: January 11, 2007**

**Response**

- 1-1. No response is required regarding the distribution of the Draft EIR to various State agencies. No comments regarding the Draft EIR were received from the Office of Planning and Research or other State agencies.





PLANNING COMMISSION (7)' 5'  
SR. PLANNER, ASST. CITY ATTY.  
CASE PLANNER APPLICANT(S)  
AGENT PC SEC. ENTERED AS INT  
PARTY ON DATE: \_\_\_\_\_  
BY: \_\_\_\_\_

Bruce Peterson  
1837 El Camino De La  
Luz  
Santa Barbara, Ca.  
93109

RECEIVED

JAN 03 2007

CITY OF SANTA BARBARA  
PLANNING DIVISION

Planning Commission  
City of Santa Barbara  
Community Development Department  
Planning Division  
630 Garden Street  
Santa Barbara, CA 93102

Honorable Commissioners:

I am writing a short note in response to the focused EIR that was required by the planning commission for the lot known as 1837.5 El Camino De La Luz. Although I have signed our neighborhood letter penned by Ray Fraco. I wish to point out several other issues.

1. The visual impacts from public areas specifically Lower La Mesa Park and the east end of Light House Creek foot bridge are significantly impacted by the original proposal and alternatives 1 and 2 in the aesthetic EIR analysis. The only possible building site on this lot to protect public views would be at the extreme west edge of the property. 2-1

2. Since the passage of measure 'B' creek protection in Santa Barbara has become a major concern. The city council in December of 2006 set a new environmental standard for building next to creeks when they required a 100 foot set back from Arroyo Burro creek on homes to be built on an 87 acre parcel. This land mark decision sets a precedent for all future buildings near Santa Barbara creeks. 2-2

3. The geology of this lot is a work in progress. The work done 2-3

10-7



Bruce Peterson  
1837 El Camino De La  
Luz  
Santa Barbara, Ca.  
93109

by Dr. Anikouchine was a summarization of past work, but provided no laboratory geologic findings, supposition rather than scientific investigation. A younger more energetic geologist would be able to provide scientific information. 2-3 CONT.

4. Legal access does not exist from El Camino De La Luz. When the property split was approved by the city council in the 1950's, the owner of 1837 was required to provide 15 foot easements from El Camino De La Luz to the lower half of the property, which they wanted to create a second lot. The lot split was contingent upon recording this fifteen foot easement; it never occurred. Dr. Barthels, the second owner of this lot received compensation in 1994 from his title company after he testified in superior court that this lot, 1837.5, was unbuildable. In 1997, the city attorney requested Dr. Barthels to provide documentation showing his legal access to the parcel. This also has not occurred. Over half the distance from El Camino De La Luz to the vacant lot there is no legal easement. Less than half the distance there is a 9 foot easement. Until this issue is resolved, there is no logical reason to continue public and private time on this matter. Dr. Barthels was financially compensated for his purchase of this imperfect and unbuildable lot. 2-4

Please consider these points when making any decisions regarding 1837.5 El Camino De La Luz.

10-8



**Bruce F. Peterson  
Grace Peterson  
Vanessa Peterson  
1837 El Camino De La Luz  
Santa Barbara, CA  
93109**

**Bruce Peterson  
1837 El Camino De La  
Luz  
Santa Barbara, Ca.  
93109**

*Bruce Peterson*  
*Grace Peterson*

*Vanessa Peterson*

10-9

**Comment Letter No. 2  
Bruce Peterson  
Date: January 3, 2007**

- 2-1. The analysis provided by the Draft EIR concluded that the development of the proposed residence, as well as the development of the alternative project design concepts, would have the potential to result in significant visual impacts to important public views. Mitigation measures to reduce the identified impacts to a less than significant level were also provided by the EIR.

Moving the proposed structure to the "extreme west edge" of the project site was not considered to be a feasible mitigation measure or project alternative because of the resulting inability to provide adequate ingress and egress to a covered parking area on the project site. The Alternatives section of the Final EIR has been amended to include a discussion of why this alternative was not considered to be feasible.

- 2-2. Setback requirements to separate new development from the top of a creek bank are established based on project-specific conditions, such as the sensitivity of biologic resources provided by the creek, potential flooding impacts, and the type and size of the proposed project. Due to the moderately high habitat value of Lighthouse Creek adjacent to the project site, and the small size of the proposed project, it was determined that the 50-foot building setback that would be provided from the top of the creek bank would be adequate to reduce potential biologic, hydrologic, geologic and water quality impacts of the proposed project to a less than significant level. The building setback from the creek provided by the proposed project would also be similar to or greater than the setbacks provided by other houses in the project vicinity that are also adjacent to the creek.
- 2-3. The purpose of Dr. Anikouchine's review was to evaluate and summarize the extensive amount of information that has been produced by 17 previous geologic investigations of the project site. No additional "scientific investigation" beyond what was provided by Dr. Anikouchine was required to evaluate potential geologic hazard impacts of the proposed project and alternatives.
- 2-4. The establishment of legal access to the project site was not an environmental issue evaluated by the project EIR. Prior to the development of the proposed project, the applicant must demonstrate to the satisfaction of the City that adequate access can be legally provided.



Rafael Franco  
1835 El Camino de la Luz  
Santa Barbara, CA 93109

LETTER No. 3

RECEIVED  
JAN 12 2007  
CITY OF SANTA BARBARA  
PLANNING DIVISION

January 12, 2007

Planning Commission  
City of Santa Barbara  
Community Development Department  
630 Garden Street  
Santa Barbara, CA 93102

Re: **Draft Environmental Impact Report**  
**1837.5 El Camino de la Luz**  
**SCH No. 2005041031**  
**November, 2006**

Honorable Commissioners:

One of the objectives of the California Environmental Quality Act is to provide a system for extracting necessary objective data on proposed projects so that individuals, commissions, or judges could make informed decisions for the public welfare. You are often requested to unnecessarily exercise the wisdom of Solomon when in fact there is a process in law to develop data to serve your informed decision. In this case, that process is the Environmental Impact Report. We submit that Solomon's wisdom would not have been required had they had DNA data.

The subject report deals primarily with two issues, visual impacts and geotechnical stability. Our comments on these and other issues were noted in our letter of Dec. 27, 2006 and at your hearing on Jan 11, 2007. At the hearing, it was evident that the geotechnical data presented was incomplete and insufficient for you to make an objective decision. The neighbors and persons affected by this project have not concluded that the slope is or is not stable; we do however conclude that the geotechnical study in this report is insufficient for the EIR. Please consider the following:

1. The report bases its conclusions on a peer review by Dr. Anikouchine in which he admits that he did not have the technical data that accompanied the reports he was evaluating. He called this a "regrettable lapse". Dr. Anikouchine was hired by the City of Santa Barbara. Would the City adopt any report, including budgetary reports, without specific data? We agree with Dr. Anikouchine that this is "regrettable", but we could not find this excuse anywhere in the California Environmental Quality Act. The data is available and should be included in this report.

10-11

2. There are two issues governed by the Coastal Act and Code, the effects of erosion on the bluff and the underlying stability of the soil or bedrock. Provisions and regulations are made in law for consideration of erosion and an analysis of the stability of the slope.

- a. The effects of erosion are considered by estimating historical precedent and analysis, and the location of the top of the coastal bluff as defined by law (California Code of Regulations, Title 14, Sec. 13577(h)(2)). We do not have an objection with the rate of erosion defined in the EIR, 4 to 8 in. per year, but we disagree with the defined "top of bluff" drawn on the project plans and used as a basis for all subsequent analysis and conclusions.

3-2a

First, we would like the record to be corrected that the top of bluff drawn on the architect's plans are not drawn or certified by a geologist, soils engineer or surveyor, but rather by the architect. This plan is used by Dr. Anikouchine who then mislabels this line as the "75-yr setback" in his report (Figure 1, page 2). Dr. Anikouchine further stated that the definition of top of bluff stipulated in law is "arbitrary". With all due respect, many of our laws are arbitrary, but we live under a system of laws not opinions. We have submitted a topographic map signed by a California Registered surveyor indicating the correct topography for the site, and the top of bluff as defined by law. This plan also indicates the different rates of erosion and the architect's stipulated top of bluff. Nowhere in the law is the top of bluff defined as a line starting at the highest point and dropping forty feet to the creek as drawn by the architect.

3-2b

3-2c

- b. The report states that slope stability calculations were performed using the Modified Bishop method. This method is appropriate for circular-shaped failures only and is used for homogenous, isotropic geologic materials. The subject slope is comprised of well bedded siltstone bedrock of the Monterey Formation that is non-homogeneous and anisotropic. Individual beds vary greatly in strength, and in the orientation that the strength is defined (along bedding or across bedding). The Janbu method of analysis employing a block-shaped failure should be used to find the lowest factor of safety. The factor of safety should be directed along the lowest daylighted bedding plane. As I demonstrated at the hearing we need to determine the load, the orientation and inclination of the bedding planes, and the coefficient of friction at the lowest or most vulnerable of the bedding planes. This cannot be done without laboratory testing and data.

3-3

- c. The stability calculations are not based on a site specific cross-section drawn through the bluff face. The cross section shown on Figure 3 is very generalized. The cross section should be based on an adequately-scaled topographic map with geologic information superimposed. The cross

3-4

10-12

sections should be drawn in the direction of most probable failure. More than one cross section may be necessary.

- d. The geologic material strength was "estimated using the Hoek-Brown (2002) Failure Criterion". The use of material strengths for slope stability analysis are not generally accepted by reviewing agencies in California. Site-specific geologic material samples should be obtained and tested by acceptable methods. The material strengths used in the analysis should also include testing that is consistent with the strength of the rock along bedding, which is generally the weakest strength direction for rock. 3-5
- e. As a separate item in the report, sea cliff erosion, is estimated to be 4 inches per year. A finding should be made as to the effect of a future sea cliff profile and its effect on slope stability. 3-6

As stated earlier, we have not drawn a conclusion on the stability of the slope. We have studied the previous reports, many of which are simply letters of opinion without data. We have studied the typology of the Monterey Formation shale that forms the cliff. The day-lighted and decomposed bedding planes are easily visible. We have watched the bluff on a weekly basis for 25 years. We have experienced the surficial slides and are familiar with the 1976 massive slide just 400 ft. to the west. From this experience we can conclude that the data presented to you for this project is erroneous and incomplete. On this particular issue, accurate data can be obtained, analyzed and presented to you to make an objective decision. 3-7

Thank you for your consideration

Sincerely,



Ray Franco

Attachments:

1. List of methods for slope stability analysis.
  2. Slope Stability Calculator for the Modified Bishop's Method
  3. Non-circular Failure Surface: Jambu's Method
  4. A Brief History of Hoek-Brown failure criterion
  5. Factors of Safety Definition
  6. Project Description: USGS Coastal and Marine Slope Stability and Landslides
- 3-8

Comment Letter No. 3

Rafael Franco

Date: January 12, 2007

3-1. All of the information available to the City from the 17 previous geologic investigations of the project site was provided to Dr. Anikouchine for his review of potential project-related geological hazard impacts. Although some of the reports were missing large format maps, a sufficient amount of information regarding the project site was available for Dr. Anikouchine to conduct his review, and to adequately evaluate the potential for the proposed project and alternatives to result in significant impacts. CEQA Guidelines section 15151 establishes standards for determining the adequacy of the environmental impact analysis provided by the EIR. This section indicates that "An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible." If the large format maps from some of the previous studies of the project site are no longer available to the City, it would not be reasonable, or required by CEQA, to require that the maps be included in the analysis provided by the EIR. Based on the peer review of the 17 previous geologic investigation reports that have been prepared for the project site, Dr. Anikouchine concluded that potential geologic hazard impacts could be reduced to a less than significant level with the implementation of proposed mitigation measures.

3-2a. As part of the peer review of the previous geologic investigations prepared for the project site, Dr. Anikouchine noted that the top of the seacliff (bluff), as defined by the California Coastal Commission, was mapped by Fisher in 2001. Fisher is a geologist qualified to interpret the Coastal Commission's definition of bluff edge and to make a determination regarding the location of the bluff edge on the project site. The line depicted on Figure 1 of Dr. Anikouchine's report does not depict the top of bluff, which is roughly 25 feet southward of the building pad area that is highlighted on the figure. The setback line depicted in Dr. Anikouchine's report provides an accurate representation of the location of the proposed setback line from the top of the bluff given the size and scale of the figure.

As described on page 5.2-2 of the EIR, 75 years is a common value used to estimate the useful design life of new structures, and a bluff edge setback that would generally allow a new structure to exist safely for 75 years is commonly used. Based on a calculated average rate of seacliff retreat in the project vicinity of four inches per year, the proposed 25-foot setback from the edge of the bluff would provide an adequate setback distance for the proposed residence.

3-2b As part of his review, Dr. Anikouchine determined that the top of bluff line identified by Fisher is depicted on the project plans, and that the top of bluff line accurately interprets the definition of "top of bluff" used by the California Coastal



Commission. Dr. Anikouchine describes the Coastal Commission's definition of the bluff edge as being "somewhat arbitrary" because it is based on a perceived static geometry of the bluff configuration, rather than upon actual coastal processes. Such process were described in Dr. Anikouchine's report as including changes to the bluff configuration resulting from the on-going landward retreat of the bluff, and terrestrial erosion (rainfall runoff). Based on the Coastal Commission's definition of bluff edge, future changes to the configuration of bluff may result in the relocation of the bluff edge. Dr. Anikouchine's description of the Coastal Commission's definition of bluff edge does not indicate or imply that the definition should in any way be disregarded. Furthermore, a Coastal Commission memo dated January 16, 2003 ([www.coastal.ca.gov/w-11.5-2mm3](http://www.coastal.ca.gov/w-11.5-2mm3)), notes that the definition of bluff edge is "largely qualitative, and the interpretation of the topographic profile to yield a bluff edge determination at any given coastal bluff may be subject to various interpretations." Given the acknowledgement that the identification of the bluff edge based on the Coastal Commission's definition may move over time or result in different determinations, the description of the criteria as being "somewhat arbitrary" was not inappropriate.

- 3-2c. A comparison of the project site topographic contours depicted on the map prepared by Penfield & Smith (June, 2006/ revised December 2006, see attached) and the topographic contours depicted on the proposed project plans indicates that the both surveys have depicted project site contours that are generally similar in configuration and length. Therefore, the two maps generally depict similar topographic conditions within the proposed building area. The only major difference between the two surveys is that the Penfield and Smith elevation contours are labeled as being approximately nine to ten feet higher in elevation than the contours on the project site maps. For example, the Penfield and Smith maps indicate that the proposed building pad has an elevation above sea level that ranges from approximately 111 feet in the northwest corner to 99 feet in the southeast corner. The project plans depict similarly shaped project site contours, but indicates that the existing building pad elevations range from approximately 101 to 90 feet. This discrepancy between the two maps does not affect the impact analysis of the proposed project, and does not require alterations to the design of the alternative design concepts that were evaluated by the EIR.

The project site contours depicted by the Penfield & Smith map are not complete and do not include the entire project parcel. Furthermore, the "top of bluff" designation included on the Penfield & Smith map does not comply with the top of bluff definition adopted by the Coastal Commission. The top of slope as defined by the Coastal Commission occurs "at that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff." Cross sections of the seacliff at the project site are provided as Figure 3 in Dr. Anikouchine's March 15, 2005 peer review report of previous geologic studies of the project site (EIR Appendix

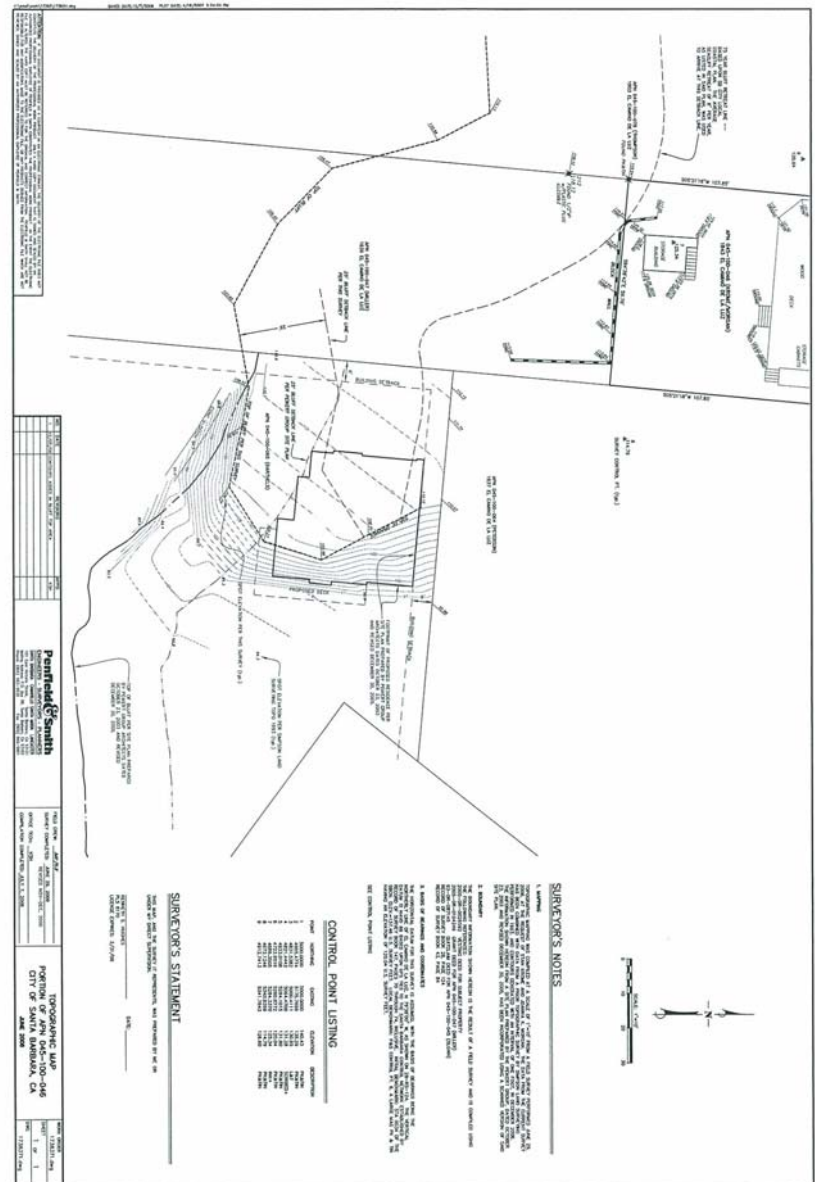
A). The cross sections identify the major break in cliff slope gradient that comply with the Coastal Commission's definition of the top of bluff. The top of bluff line depicted on the project plans corresponds to the location identified by Dr. Anikouchine. Therefore, the top of bluff determination made by Fisher, confirmed by Dr. Anikouchine, and depicted on the proposed project plans is considered to be accurate.

- 3-3. The Modified Bishop method of slope stability analysis is but one of several methods based upon the method of slices. The method of slices is not restricted to circular slip surfaces. The commonly-used STABL series of methods are capable of applying the method of slices to any kind of slip surface. The method used by Dr. Anikouchine is a modification of the Bishop method integrated in the STABL program. Its application is to perform the analysis repeatedly to determine which surface (of any shape) is the critical surface. The Bishop method is used because it ignores lateral shear effects on the slices and thus gives the most conservative result. The Janbu, Spencer, Morgenstern-Price and other methods all treat the lateral shear effects as contributing to the shear strength of the slices in a potential slide mass and so tend to overestimate the factor of safety of a critical surface.
- The evidence of landslide failure at the SE corner of the subject parcel indicates that the mode of sliding was not a block slide down a weak dip surface, but instead followed a failure plane that transected the rock mass across the bedding. The use of a rotational slide surface in the slope stability analysis is quite justified.
- 3-4. Figure 3 in Dr. Anikouchine's report shows the two profiles along which stability analyses were performed. These profiles were drawn from the city's topographic map.
- 3-5. Laboratory tests of samples of rock materials to derive material properties are notoriously inaccurate and tend to overestimate the strength of rock masses in situ. The Hoek-Brown method estimates the bulk strength of a rock mass and is therefore to be preferred. The commenter's assertion that a rock mass is weakest along bedding is incorrect. Ubiquitous jointing almost always causes minimal strength in a rock mass and can be a significant factor even when block sliding is involved.
- 3-6. Predicting future seacliff profiles for the purpose of conducting additional slope stability analysis would be speculative and not required by CEQA. A general description of possible changes to the seacliff profile were provided on pages 9 and 10 of Dr. Anikouchine's report under the heading of "75-year Setback." This description indicates that slope of the cliff face could be reduced should the cliff retreat landward, thereby increasing the width of the beach and decreasing the erosive effects of ocean waves. Under these conditions, terrestrial erosion would



become the dominant erosive force, which would decrease the overall slope of the bluff. The marine erosion rate at the base of the coastal bluff should not be applied as the rate of erosion at the upper break in slope defining the top of the seaward slope. The marine erosion rate will typically be greater than the erosion rate of the seaward slope. It is also noted that the seacliff could become steeper because of proposed mitigation to reduce runoff over the cliff face. Should this occur, wave action would remain the dominant erosive force affecting the seacliff.

- 3-7. The slope stability analysis provided by Dr. Anikouchine has been prepared in conformance with standard engineering practice. The visual seaciff conditions cited by this comment do not provide substantial evidence for concluding that the slope stability analysis is inadequate for the purpose of conducting a CEQA review of potential geologic hazard impacts.
- 3-8. Attachments provided as part of this comment letter have been provided in EIR Appendix D.



December 27, 2006

Planning Commission  
City of Santa Barbara  
Community Development Department  
Planning Division  
630 Garden Street  
Santa Barbara, CA 93102

LETTER No. 4

Re: **Draft Environmental Impact Report**  
**1837.5 El Camino de la Luz**  
**SCH No. 2005041031**  
November, 2006

Honorable Commissioners:

Please consider the following comments on the subject report.

This Planning Commission has required the preparation of a focused EIR to study the aesthetic impacts of the proposed project. Specifically, the report was to study the visual impacts on the public views of the ocean and the Channel Islands from La Mesa Park and other public areas. This draft report concludes:

**As presently designed, the proposed residence would have the potential to substantially obstruct existing ocean views provided from important public view points, including views provided from the "benches" area of La Mesa Park and the eastern edge of Lighthouse Creek footbridge.**

This conclusion, and the need to study three project alternatives, required the expansion of the EIR to study additional impacts including biological impacts, geotechnical hazards, fire hazards, transportation, water resources, air quality, cultural resources, noise, and public services. Issues of legal compliance of the original subdivision of the property and access are not included in this EIR, but are referenced with the inclusion of our previous correspondence.

#### AESTHETICS

We agree with the conclusions of the EIR regarding the impacts of the proposed project. **The project has a significant impact on public views of the ocean and Channel Islands.** The design violates the policies and requirements of the City of Santa Barbara Local Coastal Plan. We appreciate the two alternatives produced in this report; they are incremental design variables that attempt to reduce the impact. We disagree with the conclusion that Alternative 2 would reduce the impact to less than significant, nor is Alternative 2 the only alternative that would accomplish this.

Aesthetics is a subjective issue, but this is not an aesthetic issue of color, bulk or compatibility with the neighboring houses. This Planning Commission concluded that the proposed project could have an impact on public views and therefore required this focused EIR. The question then becomes, how much of the public view can be given up and allow a house to be built? This is why alternatives 1 and 2 were developed.

This may be subjective, so let's do some comparisons. If a structure were proposed adjacent to the Brown Pelican on Arroyo Burro Beach, would it be considered less than significant? Would a house on the west end of Shoreline Park be considered less than significant? Both of these hypothetical structures could be designed to be compatible with the existing adjacent structures, color, scale and so forth, but we would all agree that the impacts would still be significant. Both of these proposals would incrementally reduce the public views protected by the Local Coastal Plan. Both would be classified as Class I impacts under CEQA.

In both of these cases, the views are broader than those from La Mesa Park. The proportional impact on the narrower views from La Mesa Park are much greater than the hypothetical impacts on Arroyo Burro or Shoreline Park and therefore exponentially more significant. If you are to make a subjective judgement on the impact of a project and various reductions of public views, then it should be made in the context of other similar proposals. We submit that the proposed residence or alternatives 1 and 2 should be Class I Significant and Unavoidable Impacts under CEQA.

Santa Barbara has a unique history of coastal preservation. Access to our beaches and views of the ocean and Channel Islands are our greatest natural resource. We believe that any violation of the LCP policies protecting these public views is a significant impact and should be so listed in this EIR.

#### GEOTECHNICAL HAZARDS

The EIR references Dr. Anikouchine's review of 17 previous reports or letters for this project, and correctly concludes that

**"An on-site feature identified by previous evaluations may have the potential to result in a significant slope stability impact".**

We agree with this conclusion, but disagree with the proposed mitigation measure calling for inspection of a building pad prior to the issuance of a grading permit. CEQA requires this analysis prior to adoption of the EIR. Considering the conflicting conclusions of the 17 reports based on hypotheses rather than conclusive laboratory test results, it is imperative that this exploration and testing be included as part of this report. The following issues leave the EIR inconclusive:

1. In all the reports dating back to 1971, only two are based on actual borings on site, Buena Engineers 1971 and Pacific Geoscience 1987.



2. Dr. Anikouchine did not have geologic maps included in these reports nor did he have log borings or laboratory test results. He notes this as a "regrettable lapse". 4-4c
3. Dr. Anikouchine did not do any borings, extract any samples or conduct laboratory tests. 4-4d
4. The Smith 1980 report reviewed the Buena report and concluded that the area under the flat paved pad was unsuitable for construction based on his discovery of a bedding plane fracture and the overlaying of expansive alluvium layer 6 to 8 ft in depth. CFG 1996 takes exception to Smith's fracture and identifies this as a 1 inch asphaltum bed. Dr. Anikouchine agrees with Smith, thus the unresolved issue of the stability of the upper pad considered for Alternatives 1 and 2. 4-4e
5. The EIR classifies the soils under the paved area as "terrace sand"; we do not know where this conclusion comes from. Smith 1980 classifies this as "moderately expansive alluvium". 4-4f
6. Pacific Geoscience 1987 drilled 3 exploratory borings but did no soils analysis on sample materials. 4-4g
7. Fig. 1 in Dr. Anikouchine's report draws the line "75 ft.-yr setback" incorrectly. The line reflects the "top of bluff" as drawn by the architect, not the actual setback. 4-4h
8. The rate of cliff retreat varies in the reports from 4 inches to 8 inches. 4-4i
9. None of the 17 reports did a slope stability analysis required by code. Dr. Anikouchine, the reviewer, took it upon himself to complete these calculations, without field borings or laboratory test data. This is a highly unusual practice for a reviewer of geotechnical reports. His conclusions place the liability on the City of Santa Barbara. 4-4j

#### TOP OF BLUFF and 75 YEAR SETBACK

The top of bluff is incorrectly plotted on all the site plans and Dr. Anikouchine's Figure 1. The EIR correctly references the Coastal Commission's definition of "bluff edge" as follows:

In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken as the cliff edge..." (California Code of Regulations, Title 14, Section 13577(h)(2)). 4-5a

The definition could not be any clearer. The conditions of this parcel are exactly as defined in the law. Every report agrees that the lower southeast terrace is an excavated terrace;

therefor the lower terrace should not to be considered in drafting the edge of bluff, yet all of the plans follow the plan drawn by the architect. This plan draws a cross-gradient line that drops 40 ft down the cliff before it returns paralleling the creek. The enclosed survey by Penfield & Smith correctly plots the edge of bluff as defined by law as well as the one drawn by the architect. This survey also indicates the various 75 year setbacks, 4 and 8 inches per year. 4-5b

In this regard, we take exception to Dr. Anikouchine's comment that the Coastal Commission's definition of "edge of bluff" is "arbitrary"; **it is the law**. It is not the reviewer's prerogative to discount definitions in law, and make alternative suggestions as to what "should serve the purpose...of the City of Santa Barbara". Clearly, none of the proposed designs comply with code requirements, even the minimal assumed 4 inches per year regression of the bluff. 4-5c

#### TRANSPORTATION and IMPACTS OF CONSTRUCTION

The EIR refers to construction impacts, i.e. parking and storage of building materials, in the transportation section. However, the report does not address the actual physical process of construction. The report considers the excavation of 500 cubic yards of soil as less than significant and in most cases, we might agree. However, in this location, there is no access for trucks to load and haul away materials. The required 75 year setback leaves a pad area approximately 27 ft x 40 ft. for the house, trucks, and building materials. This area is also the area noted as unbuildable in Smith 1980 and the uncertain fracture in the bedrock agreed to by Dr. Anikouchine from which the EIR concludes that there is a potentially significant slope stability impact. We recognize the impacts of construction are temporary, but in this case they are impossible and significant. 4-6

#### BEACH ACCESS

The EIR notes that there is beach access via an existing trail, a trail that has been in place for over 50 years. The report assumes that this trail would remain in place. We would request that this issue be clarified in the EIR. 4-7

#### CREEKS

The report omits creek set back requirements of the City of Santa Barbara. 4-8

#### FIRE HAZARDS

The report addresses this issue by requiring that the house have a fire sprinkler system. We believe this misses the concerns of the LCP with regards to houses on the edge of creeks and the high fire hazard, **not to this house**, but to all of the other structures within this environment. The proposed structure would foreclose access to emergency or service vehicles. The existing pad has served these emergency vehicles on a number of occasions. 4-9

## APPENDIX B

The EIR includes our previous correspondence re. Draft Mitigated Negative Declaration, dated April 11, 2005. We note the omission of our June 6, 2005 correspondence and its attachments; we enclose a copy of the letter and attachments and request that these be included for the record in the EIR. 4-10

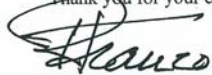
We also enclose a copy of the Penfield and Smith survey plotting the edge of bluff and required setbacks, dated Dec. 11, 2006 and request that this be added to the record. —

Finally, the first consideration of the proposed project is the legal status of the subject parcel. This question has been raised numerous times in correspondence with this Commission. The City attorney in his letter of June 4, 1997 wrote to the applicant's attorney:

**"it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as a necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity".** 4-11

The applicant has testified in court that the parcel is unbuildable. In a lawsuit against the title company the defendant agreed that title, i.e. the access easement, was spurious. Dr. Barthels has prevailed and been compensated for his loss. Once again we ask, why is the City of Santa Barbara processing this application, wasting everybody's time and money?

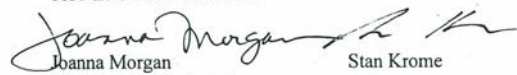
Thank you for your consideration.



Rafael Franco  
1835 El Camino de la Luz

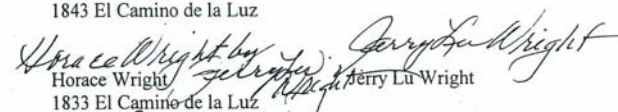


Linda L. Franco



Joanna Morgan  
1843 El Camino de la Luz

Stan Krome



Horace Wright  
1833 El Camino de la Luz

Jerry Lu Wright



Bruce Peterson  
1837 El Camino de la Luz



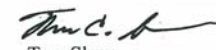
Maggie Peterson



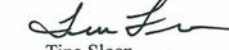
Peter Miller  
1839 El Camino de la Luz



Jennifer Miller



Tom Sloan  
1841 El Camino de la Luz



Tine Sloan



Comment Letter No. 4  
Rafael and Linda Franco  
Joanna Morgan  
Stan Krome  
Horace and Jerry Lu Wright  
Bruce and Maggie Peterson  
Peter and Jennifer Miller  
Tome and Tine Sloan

Date: December 27, 2007

- 4-1. The conclusion by the EIR that the proposed project would have the potential to result in significant visual impacts to important public views does not require that the EIR provide additional evaluations of other potential environmental impacts that were previously determined by the Initial Study to be less than significant or that could be reduced to a less than significant level with the implementation of identified mitigation measures. The alternatives to the proposed project evaluated by the EIR would result in additional excavations on the top of the bluff, which could have the potential to result in geologic/slope stability impacts not previously considered by the Initial Study. Therefore, an evaluation of potential geologic impacts was included in the project EIR. Other environmental impacts identified by the Initial Study as having the potential to result from the development of the proposed residence, such as impacts to biological and cultural resources, noise, traffic, hazards, etc., would not be substantially affected by variations in the size and configuration of a residence constructed on the project site.

Section 2.5 of the EIR indicates that access to the project site an issue that remains to be resolved. The site access mitigation measure identified by the Initial Study prepared for the project and included in the EIR summary section indicates that the project applicant must provide the City with adequate evidence of legal access to the project site. Therefore, issues related to the establishment of legal access to the project site were adequately disclosed by the EIR.

- 4-2. The EIR indicates that with the implementation of proposed mitigation measures, the proposed project and alternative design concepts may be found consistent with the applicable policies of the City's General Plan, Local Coastal Plan, Residential Design Guidelines and the Coastal Act. The EIR also concluded that potential visual impacts of the proposed project and the alternative design concepts could be reduced to a less than significant level with the implementation of proposed mitigation measures.
- 4-3. The EIR has provided detailed (photosimulations) evaluations of the potential visual impacts of the proposed project and alternative design concepts. This evaluation was conducted by comparing existing visual conditions to post-project

development conditions, and evaluating the changes in existing environmental conditions to a set of pre-determined significance criteria. A similar analysis was provided for two alternative project design scenarios. The analysis of potential visual impacts associated with the proposed project and alternative design concepts provided an objective basis for evaluating significant impacts and identifying feasible mitigation measures. This comment indicates that the proposed project and alternatives should be considered to result in significant and unavoidable impacts to existing visual conditions, however, no basis or justification to support the suggested conclusion has been provided.

- 4-4a. As indicated by this comment, there have been 17 prior evaluations of the geologic conditions of the project site, plus the peer review of the previous reports and the slope stability analysis conducted by Dr. Anikouchine. The evaluation of potential geologic impacts provided by the EIR has been prepared consistent with CEQA Guidelines section 15151, which indicates that *"disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

The evaluation of potential geologic hazard impacts provided by the EIR has summarized the findings of each of the 17 previous investigations conducted at the project site, provided a site-specific slope stability analysis based on information provided by the previous reports, and is also based on Dr. Anikouchine's site reconnaissance and knowledge of engineering properties associated with the Monterey formation. The analysis has provided reasonable conclusions regarding the potential slope stability impacts of the proposed project and proposed alternative design concepts, and provided feasible mitigation measures to reduce potentially significant impacts to a less than significant level. Therefore, the EIR's evaluation of potential project-related geological impacts has been conducted consistent with the requirements of CEQA.

- 4-4b. This comment indicates that only two of the previous geologic investigations of the project site included soil boring data. No response is required.
- 4-4c. Please refer to response 3-1.
- 4-4d. A substantial amount of information about the geological conditions that exist at the project site is provided by the 17 previous investigations that have been prepared for the site. In addition, general knowledge of the engineering properties of the Monterey formation has provided a sufficient basis for preparing the slope stability analysis provided by the EIR. The purpose of Dr. Anikouchine's slope stability analysis was to evaluate the assertion by previous evaluators, including Smith, that the bluff at the project site was stable. It was not



the intent of the evaluation to exempt the property owner from preparing a complete geotechnical evaluation of the project site and the proposed project.

- 4-4e. Dr. Anikouchine's report does not indicate that he agrees with Smith's assessment of the presence of an "open bedding plane fracture" on the project site. Page 6, paragraph four of Dr. Anikouchine's report states: *"Fisher takes issue with several other of Smith's findings. He takes exception with the lack of proper identification of earth materials on the subject parcel, the light treatment of slope stability, the misidentification of the 'open bedding plane fracture', which is actually a 1 inch thick asphaltum bed, and dismissal of the matter of daylighted strata at the SW part of the subject parcel. I am in agreement with Fisher in these instances"*
- 4-4f. The description of the project site containing terrace sand soils is from the assessment of project site conditions provided by CFG Consultants (1996).
- 4-4g. This comment indicates that in 1987 three borings were conducted on the project site but no soils analysis was conducted. No response is required.
- 4-4h. Please refer to response 3-2a.
- 4-4i. This comment indicates that the rate of seacliff retreat varies from four to eight inches per year. Previous investigations of the project site, including aerial photo interpretation, have concluded that the average rate of seacliff retreat at the proposed project site is on the order of four inches per year.
- 4-4j. Please refer to response 4-4a.
- 4-5. Please refer to response 3-2a. The top of the bluff at the project site was delineated by a geologist (Fisher, 2001), not the project architect.

Please refer to response 3-2b and the reference to the Coastal Commission memo dated January 16, 2003. This memo indicates that the position of a bluff edge may be modified by factors such as the landward retreat of the bluff or anthropogenic modifications resulting from grading or the construction of structures. It is not disputed that previous grading of the project site modified the configuration of the slope, affecting the location of the bluff edge as defined by the Coastal Commission. As indicated by this comment, the bluff edge has been defined as required by state law and has been determined based on existing condition even though those condition have been modified due to previous grading operations.

Please refer to response 3-2c regarding the topographic contours and bluff edge depicted on the map recently prepared by Penfield & Smith.

- 5a. Please refer to response 4-5 regarding man-made changes to the configuration of the bluff on the project site.
- 5b. Please refer to response 3-2c, which indicates that the top of bluff on the project site was determined by a geologist, not the project architect. Also, the top of bluff depicted on the Penfield & Smith map does not comply with the Coastal Commission's definition of "top of bluff."
- 5c. Please refer to response 3-2b regarding the description of the Coastal Commission definition of the top of bluff as "arbitrary."
6. The proposed project would not require the exportation of soil from the project site. Project site grading and the removal of approximately 500 cubic yards of soil would only result from the implementation of the alternative design concepts evaluated by the EIR. The EIR acknowledged that construction-related access constraints could affect the export of excavated material. However the analysis provided in sections 8.2.3 and 8.3.3 under Threshold C indicates that: *"the narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load."*
- The setback area from the top of the project site bluff would apply to the development of a new structure. The setback area could be temporarily used as a staging area for the construction of a residence. The temporary use of the setback area would not result in changes to the project site that would have the potential to result in significant slope stability impacts.
7. The proposed project plans do not indicate that there would be any modifications to the existing bluff trail.
8. Please refer to response 2-2 regarding the establishment of appropriate creek setbacks.
9. The provision of fire sprinklers within a structure substantially reduces potential fire safety and suppression impacts, even in a high fire hazard zone. Development of a residence on bluff top property would not result in a significant impact to emergency vehicle access.
10. The additional attachments provided by this comment letter have been included in EIR Appendix D.
11. The City has determined that the project site is a legal parcel. Please refer to response 4-1 regarding the provision of legal access to the project site.

**10.2 JANUARY 11, 2007 PUBLIC HEARING COMMENTS** (see attached minutes)

**Rafael Franco**

Mr. Franco provided testimony that was similar to comments provided in letters dated December 27, 2006 (letter No. 2) and January 12, 2007 (letter No. 3). A summary of Mr. Franco's comments and references to responses to similar written comments are provided below.

**Mr. Franco indicated that the visual impacts of the proposed project and alternatives could not be reduced to a less than significant level.**

Please refer to response 4-3.

**Mr. Franco stated that the topography and top of bluff designation provided on the project plans is incorrect.**

Please refer to responses 3-2a and 3-2c.

**Mr. Franco indicated that a method of evaluating the stability of the project site ocean bluff, other than the method used by Dr. Anikouchine, should have been used in preparing the project site slope stability analysis.**

Please refer to response 3-3.

**Mr. Franco requested that his letter dated May 19, 2005 be included in the EIR.**

Mr. Franco's letter is actually dated June 6, 2005, and has been included in the Final EIR as part of Appendix D.

**Mr. Franco requested that minutes from the May 19, 2005 Planning Commission contain errors.**

This comment does not address the adequacy of the impact analysis provided by the EIR and no response is required. However, Mr. Franco has been invited to provide clarifying or responsive comments in writing.

**Joanna Morgan**

Ms. Morgan indicated that Penfield and Smith produced a topographic map of the project site that depicts topographic contours that are different than the contours depicted on the project plans. She also indicated that three other geologists interviewed by area residents did not agree with Dr. Anikouchine regarding potential slope stability issues. She also indicated that the proposed project was too close to Lighthouse Creek.

Please refer to comment response 3-2c regarding the mapping of topographic contours on the project site. In summary, the topography depicted on the project plans and the Penfield & Smith map are generally similar, however, the Penfield & Smith map did not map the entire project site. The top of bluff indicated on the Penfield & Smith map does not comply with the Coastal Commission's definition of the bluff edge.

This comment did not provide specific information regarding the areas of disagreement between three unnamed geologists and the results of the peer review and slope stability analysis prepared by Dr. Anikouchine. As indicated by response to comment 4-4a, CEQA Guidelines section 15151 indicates that disagreement among experts does make the EIR inadequate. Without more specific information regarding the area(s) of disagreement, a more detailed evaluation and response cannot be provided.

Please refer to response 2-2 regarding the setback of the proposed residence from Lighthouse Creek. In summary, the 50-foot setback from the top of creek bank is considered adequate due to the inaccessibility of the creek and the low potential for flooding-related impacts. The proposed setback would also be similar to or greater than other development adjacent to Lighthouse Creek in the project area.

**Peter Miller**

**Mr. Miller expressed concerns regarding slope stability, and water that may seep into drill holes developed on the project site would have the potential to result in slope stability impacts.**

The analysis provided by the EIR indicates that based on the project-specific slope stability analysis conducted by Dr. Anikouchine, the proposed project would not result in a significant slope stability impact provided that adequate surface water drainage is maintained. Proposed mitigation measures were also provided that address potential slope stability impacts that may result should excavations on the project site confirm the presence of a potential slip plane created by a "bedding plane fracture" or other similar feature. Should it be determined that drilled caissons should be provided to construct an adequate foundation for the proposed project, or if drill holes are developed on the project site for some other reason, the holes would not be left open for an extended period of time before they were filled with concrete caissons or other material. Due to the short period of time the drill holes would be exposed, they would not be a significant source of water collection/percolation, and would not result in a potentially significant slope stability impact.

**Janice Taylor**

**Ms. Taylor indicated that La Mesa Park provides significant public views that should be preserved.**



The EIR's evaluation of potential visual impacts specifically addressed potential impacts to views provided from La Mesa Park. The analysis indicated that the proposed project and the alternative project design scenarios would have the potential to result in significant visual impacts to important public views provided from the park. However, those impacts could be reduced to a less than significant level with the implementation of proposed mitigation measures.

**Brett Daniels**

**Mr. Daniels indicated that the proposed mitigation measure that requires the residence developed on the project site to provide a flat roof is not appropriate.**

Proposed mitigation measure 1a.1, which required that the proposed residence provide a flat roof to minimize impacts to ocean views from important public view points, has been deleted. Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. These building height elevations form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

**10.3 JANUARY 11, 2007 PLANNING COMMISSIONER COMMENTS**

The following comments regarding the Draft EIR for the 1837½ El Camino de la Luz Residence project were provided by the Planning Commission.

- 1. Asked Staff to reconcile differences between the different surveys of the project site that depict different elevation contours, and to resolve questions regarding the location of the bluff edge.**

A comparison of the project site topographic contours depicted on the map prepared by Penfield & Smith (June, 2006/ revised December, 2006) and the topographic contours depicted on the proposed project plans indicates that both surveys have depicted project site contours that are generally similar in configuration and length. Therefore, the two maps generally depict similar topographic conditions within the proposed building area. The only major difference between the two surveys is that the Penfield and Smith elevation contours are labeled as being approximately nine to ten feet higher in elevation than the contours on the project site maps. This discrepancy does not affect the impact analysis of the proposed project, and does not require alterations to the design of the alternative design concepts that were evaluated by the EIR.

- 2. Indicated that proposed mitigation measures should only require building height requirements and should not require the use of a flat roof.**

Proposed mitigation measure 1a.1, which required that the proposed residence provide a flat roof to minimize impacts to ocean views from important public view points, has been deleted. Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. These building height elevations form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

- 3. Expressed concerns about the project site drainage being discharged directly into Lighthouse Creek.**

A single residence would not be a substantial source of runoff water pollutants and would not have a significant project-specific impact on the water quality of Lighthouse Creek. To minimize the project's cumulative contribution to storm water quality impacts, proposed mitigation measure W-2 (Drainage System Maintenance) requires that the proposed storm water drainage system be adequately maintained, and that a maintenance plan be implemented that includes "periodic clean-out of inlets and filters and filter replacement as necessary." The implementation of this mitigation measure would reduce the proposed project's potential cumulative water quality impacts to a less than significant level.

The proposed project would also require construction activities within the Lighthouse Creek streambed to develop the proposed drainage system. Mitigation measure BIO-5 (Streambed Alteration Agreement) requires that the applicant obtain a Streambed Alteration Agreement from the Department of Fish and Game prior to the submittal of a grading permit for grading and installation of drainage devices within the banks of Lighthouse Creek. The implementation of conditions required by the Agreement would reduce the potential for impacts to habitat or other natural resources provided by the creek to a less than significant level.

- 4. Expressed concern about the ability to make required findings required for consistency with California Coastal Act Section 30251.**

In summary, this Coastal Act section requires that visual qualities of coastal areas be "considered and protected," and that new development be visually compatible with the character of surrounding areas. This section of the Coastal Act does not require that new development not change existing visual conditions.

The EIR determined that with the implementation of proposed mitigation measures, project-related impacts to existing public views of coastal resources would be reduced to a less than significant level. This determination is based on analysis conclusions that a very small portion of existing view corridors would be impaired by the project after proposed mitigation measures are implemented to reduce the size of the structure. Along with requirements to minimize the size of the residence, mitigation measures for the proposed project and both alternative design concepts require ABR approval of proposed building colors and on-site landscaping. Ultimately, the Planning Commission must determine whether these measures adequately protect the visual qualities of this coastal area, consistent with the requirements of this section of the Coastal Act.

5. **Provide a visual depiction of mitigation measure requirements, rather than a requirement to provide a flat roof.**

Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. The four elevation points depicted on the figure form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

6. **Provide additional information regarding why an alternative was evaluated that provides more floor area than the proposed project.**

The analysis of alternatives to the proposed project has complied with the requirements of CEQA, which requires that the EIR describe a range of reasonable alternatives that would feasibly attain most of the basic objectives of the project, but would avoid or substantially reduce the significant effects of the project. One of the analysis objectives for Alternative No. 1 was to demonstrate that it would be feasible to develop a residence on the project site that provides a similar amount of liveable square footage as the proposed project, while also minimizing visual impacts from important public viewing locations. The intent of this analysis was to find the “upper end” of the feasible development range on the project site that would still minimize visual impacts.

The design concept for Alternative 1 accomplished this analysis objective by placing much of the structure’s lower level livable area below existing grade. This facilitated a project design that provided more liveable floor area than the proposed project, while also providing a small reduction in the impacts to important public scenic views. Further modifications to the alternative design would still be required, however, to reduce the structure’s visual impacts to a less than significant level. These modifications would require the removal of the

structure’s third level to reduce the maximum height of the western building elevation to 15 feet. Even with the implementation of this mitigation measure, Alternative No. 1 would provide approximately 738 more square feet of livable floor area than the proposed project.

7. **Requested additional information regarding why a house that is substantially smaller than the proposed project was not evaluated.**

The analysis objective of Alternative No. 2 was to evaluate a project design that would minimize visual impacts to identified important public views by placing a minimal amount of development on the project site. Similar to Alternative No. 1, this objective was partially achieved by placing much of the structure’s livable floor area below existing grade. The most substantial portion of the alternative design structure that would extend above existing grade would be the required covered parking area.

The analysis of Alternative No. 2 determined that the visual impacts of the structure could be reduced to a less than significant level with the implementation of a mitigation measure to reduce the building’s eastern elevation to a maximum height of 25 feet above existing grade. Implementation of this measure would only require that the roof over the covered parking area be lowered approximately three feet. This mitigation measure would not result in the removal of any livable area square footage. Therefore, the design concept evaluated by Alternative No. 2 is consistent with the request by the Planning Commission to provide an evaluation of the minimum sized house that would be capable of reducing project-related visual impacts to a less than significant level.

8. **Expressed concern about the stability of slopes on the east side of the project site adjacent to Lighthouse Creek.**

The proposed structure would be located approximately 50 feet west of the top of bank identified for Lighthouse Creek. Between the proposed location of the house and the top of the creek bank, the project site elevation drops approximately 20 feet. Therefore, the slope between the proposed development site and the top of bank is approximately 2.5(h) to 1(v), which generally does not result in significant slope stability impacts. Also, the proposed project would not result in new development that would result in cutting or other alternations to the creek slope that would have the potential to result in a significant slope stability impact.

9. **Expressed concern regarding the establishment of exact building height requirements because it will look different from various viewing locations.**

Maximum building heights have been recommended as a method to minimize the size of the proposed project and to reduce impacts to important public views to a



less than significant level. The proposed building height requirements also provide some development flexibility given the sloping topography of the project site. To implement the maximum height requirements, a new figure has been added to the EIR (Figure 5.1-10), which outlines a building envelope footprint on the project site, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. The four maximum building height points depicted on the figure form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

10. **Suggestions were provided to consider additional design alternatives that explores options for the placement of the required parking on the project site.**

CEQA Guidelines section 15126.6 provides guidance regarding the selection of alternatives for evaluation in an EIR when it states that “an EIR need not considered every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternative that will foster informed decision making and public participation.” The alternatives analysis provided by the Draft EIR has evaluated a reasonable range of potential design alternative concepts, ranging from a structure that is somewhat larger than the proposed project yet provides an incremental reduction in visual impacts, to a residence that is smaller than the proposed project that would be capable of reducing visual impacts to a less than significant level with only a minor design alteration.

The alternative designs evaluated by the EIR are intended to be conceptual studies of potential site development options, and are not meant to impose specific design requirements or architectural styles. Rather, the alternative designs are intended to evaluate a range of potential building configurations and massing options that have the potential to reduce aesthetic impacts when compared to the impacts of the proposed project. This analysis approach is intended to identify a design concept (general building elevations, massing, heights, appearance, etc) with less than significant aesthetic impacts, rather than a specific project design. Submittal of a final project design that conforms to the alternative designs would be the applicant’s responsibility.

11. **Expressed a desire to see a public benefit provided by the project, such as improvements to the bridge across Lighthouse Creek.**

CEQA requires that there be a nexus, or direct connection, between the impacts of a project and the mitigation required. Since the proposed project would not result in significant direct or indirect impacts to the bridge across Lighthouse Creek, there would not be a sufficient nexus to implement a mitigation measure under CEQA to require improvements to the appearance of the bridge.

2. The Architecture 2030 presentation that was scheduled before City Council on January 23, 2007, has been moved to January 30, 2007.
3. The 3408-3412 State Street appeal to City Council has been moved to February 27, 2007. Commissioner Jostes will represent the Planning Commission.
4. Tully Clifford, Supervising Transportation Engineer, has accepted the position of Public Works Director for the City of Solvang.

C. Comments from members of the public pertaining to items not on this agenda.

Chair Jacobs opened the public hearing at 1:04 P.M. and, with no one wishing to speak, closed the public hearing at 1:04 P.M.

II. **ENVIRONMENTAL HEARING:**

**ACTUAL TIME: 1:04 P.M.**

**APPLICATION OF BRENT DANIELS, L&P CONSULTANTS, AGENT FOR HERB BARTHELS, 1837 ½ EL CAMINO DE LA LUZ, APN 045-100-065, E-3/SINGLE-FAMILY RESIDENTIAL AND SD-3/COASTAL OVERLAY ZONES, GENERAL PLAN DESIGNATION: RESIDENTIAL, 5 UNITS PER ACRE (MST2002-00214) (CDP2002-00008).**

The purpose of this hearing is to receive public comments on the Draft Environmental Impact Report prepared for this project. The proposal consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the end of the paved public road (El Camino de la Luz).

Case Planner: Victoria Greene, Project Planner  
Email: [vgreene@SantaBarbaraCA.gov](mailto:vgreene@SantaBarbaraCA.gov)

Victoria Greene, Project Planner, gave the Staff Report and introduced Debra Andaloro, Environmental Analyst, and Steve Rodriguez, Environmental Consultant.

Brent Daniels, L & P Consultants, asked to defer the applicant presentation until after the conclusion of public comment.

Commissioner’s comments and questions:

1. Asked if the lot’s legal status and access issues have been resolved.
2. Asked for clarification of the “top of bluff”.
3. Asked about the annual erosion and how bluff stability is determined.
4. Referenced the Environmental Impact Report (EIR) and the mitigation measures proposed for the alternative house designs that require a slope stability analysis, but



noted that the mitigation measures did not call for a slope stability analysis for the originally proposed residence. Asked why a slope stability analysis was not required.

5. Asked if any construction would put more potential weight on the slope than is being excavated.
6. Suggested a side-on driveway in alternative designs, and asked why no analysis was done on siting a house as far to the West as the property line allows.
7. Asked Staff if the alternatives analysis provided sufficient environmental detail to allow the Planning Commission to approve an alternative project.
8. Asked counsel if the Commission is able to choose an alternative, even if the applicant has not proposed one. Recalled that City Council has previously directed an applicant to conform to an option not chosen by the applicant.
9. Asked if an alternative has similar impacts to a proposed project and the alternative reduces impacts further than the proposed project, then is the Commission required to choose the alternative with the lesser impact.
10. Asked if the Planning Commission had the ability to request a third alternative and gave an example.
11. Asked if adding an alternative would require recirculation of the DEIR.

Scott Vincent, Assistant City Attorney, stated that the responsibility of demonstrating adequate access rests with the applicant. The city is not the arbiter of the claims, nor in a position to tell the applicant that it must settle its interest. The applicant goes through the process and takes the risk. If the applicant's project is approved, and the applicant moves forward, the neighbors can choose to block the applicant's efforts to gain permits. Ms. Hubbell added that the lot is legal, the specific concern was with the legal access to the project. If the project is approved, a condition would be placed that adequate legal access is provided to allow for fire access.

Debra Andaloro, Environmental Analyst, responded that numerous geologic surveys have been done over the years that led to determining the top of the bluff. Many of the studies looked at where the setback line should be drawn, based on defining the top of the bluff. This is not a perfect science, but the bluff top should be stable for approximately 75 years. Ms. Hubbell added that most geologists look at a site with a particular type of geology that is there, looking at soil types, etc. to determine the specific geological erosion rate for an individual site.

Steve Rodriguez, Environmental Consultant, addressed the two slope stability analyses referenced in the EIR; only one applies only to the alternatives. Both alternative designs require excavation to lower the project height of the residence. The slope stability analysis addressed whether you are putting more weight on the slope than you are taking off with the excavation. Mr. Rodriguez affirmed that, based on a slope stability analysis done by Dr. William Anikouchine, Certified Engineering Geologist, any construction would put more weight on the slope than would be removed. The other component applying to the proposed project and the two alternatives is the question of whether there is a bedding plane weakness feature on the site. Geologists have varied opinions on whether this feature exists. The

bedding plane feature is a different issue than overall slopes. Dr. Anikouchine's slope stability report was for the project. Mr. Rodriguez replied that the house could not be moved all the way to the West on the lot because it would not allow for access to the garage.

Ms. Greene responded that the EIR does provide sufficient detail to allow decision-makers to approve a project alternative.

Mr. Vincent explained the purpose of evaluating alternatives. If the Commission cannot approve the originally proposed design, the applicant can be given the option of choosing another alternative. The applicant can be given an option approved by the Commission and is free to disagree with the Commission decision and appeal to City Council.

Mr. Vincent responded that the Commission is not obligated to choose the least impacting alternative. Ms. Hubbell added that, in this project, both alternatives have Class 2 impacts. This is a discretionary decision and the Commission can continue to push to reduce the impacts so that the project chosen is the best and most consistent with policies.

Ms. Hubbell stated that, if a third alternative were added, it could mean potential recirculation of the draft EIR.

Mr. Vincent clarified that the purpose of today's hearing is for evaluating the sufficiency of the environmental document, considering whether it has looked at enough alternatives, and reconciling the difference in opinions. If the findings cannot be made for policy reasons, the applicant can be asked to present another option with suggestions on resolving the policy issues. Ms. Hubbell stated that the reasoning why other alternatives were considered, but not chosen, could be included in the EIR.

Chair Jacobs opened the public hearing at 1:35 P.M.

The following people expressed concerns with the report:

Ray Franco, speaking for a group of El Camino de la Luz neighbors, expressed concern that visual impacts are not mitigatable even with the alternatives proposed. Mr. Franco added that the topography submitted by the applicant was incorrect for defining top of bluff and shows the wrong contours; discrepancy between the top of bluff shown and top of bluff as defined in the Public Records Code. Challenged methodology and content of Dr. Anikouchine's report; slide analysis not included. Also, would like to see their letter, dated May 19, 2005, included in the EIR. Mr. Franco referenced statements recorded in the Planning Commission Minutes of May 19, 2005, as being incorrect and asked they be corrected: 1) Mr. Franco alleges he did not make the statement on Page 4 discussing a 10' easement, and 2) that the property to the north of Dr. Barthels property is his and is not the location of the portion of an access easement quitclaimed by Dr. Barthels.

Joanna Morgan identified herself as being the recipient of Dr. Barthel's quitclaim deed that narrowed his access to 9' with access to the beach by easement. Ms. Morgan contracted with Penfield and Smith for a topographic survey of her property. The survey shows different topography and bluff top than the applicant's plans. Three geologists interviewed by the neighbors did not agree with Dr. Anikouchine and felt that he was taking the liability of a potential slide. Ms. Morgan also felt the proposed project is too close to the creek.

Peter Miller spoke about the instability of the cliff. Concerned with drilling that could further alter bluff stability and City liability if the project caused instability and loss of homes.

Janice Taylor noted the importance of ocean views from La Mesa Park and the footbridge. The park is used year round. It provides a window to the sea that needs to be preserved.

With no one else wishing to speak, the public hearing was closed at 1:54 P.M.

Mr. Daniels gave the applicant presentation and clarified the draft EIR and that the applicant would review the survey data with their architect.

Mr. Daniels noted applicant disagreement with the mitigation measure requiring a flat roof.

Commissioner's comments and questions:

1. Asked Staff about the process for rectifying the difference in surveys now that another survey has been presented.
2. Asked Staff what kind of choices the Planning Commission will have in certifying the final EIR.
3. Asked how Staff will address Mr. Franco's request for corrections of the minutes of May 19, 2005. Requested that Staff review and resolve the request.
4. Noted that the EIR adequately covers the issues.
5. Two Commissioners felt that it is not appropriate to dictate architectural style in the EIR, only a height restriction is appropriate.
6. Concerned with the drainage system requirements that allow surface drainage from the property to flow into the creek.
7. Findings would have to be made to support California Coastal Act Section 30251. Noted that homes have been built in the area that do not comply with this policy. Cannot say that there is no significant impact on view when all options list some view impact.
8. Would like to see a graphic that includes the mitigations.
9. Many Commissioners expressed concern over the conflict in geology and topography information and would like to see a resolution to each, especially defining the top of the bluff.
10. Asked why alternative #1 is 25-30% larger than the proposed project.

11. Asked why a smaller house was not evaluated as part of alternative #2. Would also like to see the reasoning behind alternatives presented.
12. Two Commissioners were concerned with slopes and adequacy of setbacks on the east side of the property and with drainage to the Creek; slope stability issues need to be addressed in the EIR. Setting exact heights for this project does not work, given that it looks different depending on where viewed; three-dimensional envelope needs to be defined. Suggested an alternative #3 that explores other options for the automobile and access onto the property.
13. Some Commissioners expressed a desire to see a public benefit to mitigate the loss of a public view, such as fixing the footbridge at the park over the creek, or stairs to the beach.
14. While the document does address size, bulk, and scale, it does not necessarily provide alternatives
15. Several commissioners felt that there was insufficient information presented in the EIR to make the findings for the CDP and modification.

Ms. Greene stated that the difference in topography numbers can be resolved. The top of bluff definition can be revisited.

Ms. Hubbell stated that a review can be done of the minutes. However, the Commissioners present at the meetings in question are no longer on the Commission. Mr. Vincent suggested that a review be done and any discrepancies can be documented in the EIR response to comments. Also, Mr. Franco can submit a letter about the discrepancies.

### III. NEW ITEM:

ACTUAL TIME: 2:34 P.M.

APPLICATION OF JUSTIN VAN MULLEM, ON DESIGN, LLC, AGENT FOR JAMES AND PAMELA HALDEMAN, 1533 W. VALERIO STREET, APN: 041-071-031, A-2/R-1 ZONES, GENERAL PLAN DESIGNATION: MAJOR HILLSIDE (MST2003-00338)

The proposed project consists of the subdivision of an existing 3.45 acre site into two lots of approximately 1.725 acres each. The lots would take access from West Valerio Street via a shared private driveway that also serves two existing single-family residences. Proposed Parcel 1 would be 75,140 square feet with an average slope of 29%. A new residence is proposed on this parcel and would be approximately 5,843 square feet, including basement and garages. Proposed Parcel 2 would be 75,142 square feet with an average slope of 31%. This parcel contains the existing residence, which is approximately 5,948 square feet.

The discretionary applications required for this project are:

1. Modifications to allow the two newly created lots to have less than the required 100 feet of frontage on a public street (SBMC §28.15.080);

## **Appendix E**

### **Mitigation Monitoring and Reporting Plan**



**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

**PROJECT LOCATION**

1837½ El Camino de la Luz

**PROJECT DESCRIPTION**

The proposed project would result in the construction of a new two-story single-family residence that would provide 1,499 square feet of livable floor area. The project site is a vacant 23,885 square foot bluff-top lot located north of and adjacent to the Pacific Ocean, south of La Mesa Park, and west of Lighthouse Creek. Access to the project site would be provided along private easements extending south from the terminus of El Camino de la Luz, which is a public street.

**PURPOSE**

The purpose of the 1837½ El Camino de la Luz Residence Project Mitigation Monitoring and Reporting Program (MMRP) is to ensure compliance with all mitigation measures identified in the Initial Study and Project EIR to mitigate or avoid potentially significant adverse environmental impacts resulting from the proposed project. The implementation of this MMRP shall be accomplished by City staff and the project developer's consultants and representatives. The program shall apply to the following phases of the project:

- Plan and specification preparation
- Pre-construction conference
- Construction of the site improvements
- Post Construction

**I. RESPONSIBILITIES AND DUTIES**

A qualified representative of the developer, approved by the City Planning Division and paid for by the developer, shall be designated as the Project Environmental Coordinator (PEC). The PEC shall be responsible for assuring full compliance with the provisions of this mitigation monitoring and reporting program to the City. The PEC shall have authority over all other monitors/specialists, the contractor, and all construction personnel for those actions that relate to the items listed in this program.

It is the responsibility of the contractor to comply with all mitigation measures listed in the attached MMRP matrix. Any problems or concerns between monitors and construction personnel shall be addressed by the PEC and the contractor. The contractor shall prepare a construction schedule subject to the review and approval of the PEC. The contractor shall inform the PEC of any major revisions to the construction schedule at least 48 hours in advance. The PEC and contractor shall meet on a weekly basis in order to assess compliance and review future construction activities.

**A. PRE-CONSTRUCTION BRIEFING**

The PEC shall prepare a pre-construction project briefing report. The report shall include a list of all mitigation measures and a plot plan delineating all sensitive areas to be avoided. This report shall be provided to all construction personnel.



The pre-construction briefing shall be conducted by the PEC. The briefing shall be attended by the PEC, construction manager, necessary consultants, Planning Division Case Planner, Public Works representative and all contractors and subcontractors associated with the project. Multiple pre-construction briefings shall be conducted as the work progresses and a change in contractor occurs.

The MMRP shall be presented to those in attendance. The briefing presentation shall include project background, the purpose of the MMRP, duties and responsibilities of each participant, communication procedures, monitoring criteria, compliance criteria, filling out of reports, and duties and responsibilities of the PEC and project consultants.

It shall be emphasized at this briefing that the PEC and project consultants have the authority to stop construction and redirect construction equipment in order to comply with all mitigation measures.

Once construction commences, field meetings between the PEC and project consultants, and contractors shall be held on an as-needed basis in order to create feasible mitigation measures for unanticipated impacts, assess potential effects, and resolve conflicts.

## II. IMPLEMENTATION PROCEDURES

There are three types of activities which require monitoring. The first type pertains to the review of the Conditions of Approval and Construction Plans and Specifications. The second type relates to construction activities and the third to ongoing monitoring activities during operation of the project.

### A. MONITORING PROCEDURES

The PEC and required consultant(s) shall monitor all field activities. The authority and responsibilities of the PEC and consultant(s) are described in the previous section.

### B. REPORTING PROCEDURES

The following three (3) types of reports shall be prepared:

#### 1. Schedule

The PEC and contractor shall prepare a monthly construction schedule to be submitted to the City prior to or at the pre-construction briefing.

#### 2. General Progress Reports

The PEC shall be responsible for preparing written progress reports submitted to the City. These reports would be expected on a weekly basis during grading, excavation and construction, activities. The reports would document field activities and compliance with project mitigation measures, such as dust control and sound reduction construction.

3. Final Report

A final report shall be submitted to the Planning Division when all monitoring (other than long term operational) has been completed and shall include the following:

- a. A brief summary of all monitoring activities.
- b. The date(s) the monitoring occurred.
- c. An identification of any violations and the manner in which they were dealt with.
- d. Any technical reports required, such as noise measurements.
- e. A list of all project mitigation monitors.

C. MMRP MATRIX

The following MMRP Matrix describes each initial study mitigation measure, monitoring activities and the responsibilities of the various parties, along with the timing and frequency of monitoring and reporting activities. For complete language of each condition, the matrix should be used in conjunction with the mitigation measures described in full in the Initial Study.

The MMRP Matrix is intended to be used by all parties involved in monitoring the project mitigation measures, as well as project contractors and others working in the field. The Matrix should be used as a compliance checklist to aid in compliance verification and monitoring requirements. A copy of the MMRP matrix shall be kept in the project file as verification that compliance with all mitigation measures has occurred.

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
<p><b>AES-1a. Revised Project Design.</b> Revised project design plans shall be provided to the Single Family Design Board for review and approval. Any structure developed on the project site shall be located within the building envelope depicted on Figure 5.-10.</p> <p>1a.1. The maximum height of the structure's east elevation shall not exceed 25 feet, as measured from existing grade.</p> <p>1a.2. The maximum height of the structure's west elevation shall not exceed 15 feet measured from existing grade.</p> <p>1a.3. The maximum building elevations for the structure's east and west elevations shall form a plane above the existing grade of the project site. The height of any structure located on the project site must be located within the building envelope and may not extend above the plane</p> <p>1.a.4 The proposed residence design shall be revised to substantially reduce or eliminate the use of understory walls.</p>	Applicant			
<p><b>AES-2a. Color Approval.</b> Proposed paint and material colors to be used on the residence shall be approved by the Single Family Design Board). Building colors shall consist of neutral or earth-tone colors. Subsequent color changes proposed for the residence shall be approved by the Single Family Design Board.</p>	Applicant			
<p><b>AES-3a. Revised Project Design.</b> Proposed landscape planting materials shall be approved by the Single Family Design Board. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature, will not attain a height that exceeds the height of the residence.</p>	Applicant			
<p><b>AO-1. Dust Control.</b> During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.</p>	Applicant/ Contractor			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
<b>AQ-2. Vehicle Speed.</b> Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.	Applicant/ Contractor			
<b>AQ-3. Soil Stockpiles.</b> If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.	Applicant/ Contractor			
<b>AQ-4. Gravel Pads.</b> Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.	Applicant/ Contractor			
<b>AQ-5. Site Watering.</b> After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.	Applicant/ Contractor			
<b>AQ-6. Site Monitor.</b> The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.	Applicant/ Contractor			
<b>AQ-7. Portable Equipment.</b> All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.	Applicant/ Contractor			
<b>AQ-8. Mobile Construction Equipment Compliance.</b> Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at <a href="http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm">www.arb.ca.gov/msprog/ordiesel/ordiesel.htm</a> .	Applicant/ Contractor			
<b>AQ-9. Diesel Equipment Idling.</b> All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction	Applicant/ Contractor			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.				
<b>AQ-10. Diesel Equipment Standards.</b> Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.	Applicant/ Contractor			
<b>AQ-11. Replacement of Diesel Equipment.</b> Diesel powered equipment should be replaced by electric equipment whenever feasible.	Applicant/ Contractor			
<b>AQ-12. Diesel Equipment Emission Control.</b> If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.	Applicant/ Contractor			
<b>AQ-13. Catalytic Converters.</b> Catalytic converters shall be installed on gasoline-powered equipment, if feasible.	Applicant/ Contractor			
<b>AQ-14. Construction Equipment Maintenance.</b> All construction equipment shall be maintained in tune per the manufacturer's specifications.	Applicant/ Contractor			
<b>AQ-15. Engine Size.</b> The engine size of construction equipment shall be the minimum practical size.	Applicant/ Contractor			
<b>AQ-16. Construction Equipment Use.</b> The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.	Applicant/ Contractor			
<b>AQ-17. On-Site Lunch.</b> Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.	Applicant/ Contractor			
<b>BIO-1 Habitat Restoration.</b> Areas between the proposed building site and Lighthouse Creek disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods.	Applicant			



**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
Vegetation I shall be removed by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include western sycamore, coast live oaks, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of bare slopes to prevent short-term erosion. The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.				
<b>BIO-2 Appropriate Plants/Hardscape on Bluff.</b> Special attention shall be paid to the appropriateness of the existing and proposed plant material on the sloped areas. All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed using hand and/or chemical methods and replaced with appropriate plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's report, dated January-February 2006.. The landscape plan shall be provided to the Community Development Department Staff and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.	Applicant			
<b>BIO-3 Irrigation System.</b> The irrigation system shall be designed and maintained with the most current technology to prevent a system failure, and watering of vegetation on the bluff shall be kept to the minimum necessary for plant survival. The drip system along the bluff shall be removed after two full seasons of plant growth.	Applicant			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

**PAGE 5 of 9**

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
<b>BIO-4 Erosion Control/Water Quality Plan.</b> An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City.	Applicant			
<b>BIO-5 Streambed Alteration Agreement.</b> The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Game, prior to submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.	Applicant			
<p><b>CR-1 Unanticipated Archaeological Resources Contractor Notification.</b> Standard discovery measures shall be implemented per the City master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Owner shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.</p> <p>If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.</p> <p>If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of</p>	Applicant/Contractor			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
the find. Work in the area may only proceed after the Environmental Analyst grants authorization.  A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.				
<b>GEO-1a. Drainage System Requirements.</b> All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to Lighthouse Creek east of the parcel. Landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.	Applicant/ Contractor			
<b>GEO-2a Foundation Design Approval.</b> The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.	Applicant/ Contractor			
<b>H-1 Automatic Fire Sprinklers.</b> New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.	Applicant/ Contractor			
<b>H-2 Monitored Fire Alarm System.</b> A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.	Applicant/ Contractor			
<b>H-3 Compliance with High Fire Construction Requirements.</b> The new residence shall be build in accordance with the City's High Fire Construction requirements.	Applicant/ Contractor			
<b>H-4 Fire Protection System Maintenance.</b> The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.	Applicant/ Contractor			
<b>N-1 Neighborhood Notification Prior to Construction.</b> At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and	Applicant/ Contractor			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the (Project Environmental Coordinator (PEC) and Contractor(s), site rules and Conditions of Approval pertaining to construction activities, and any additional information that will assist Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.				
<p><b>N-2</b> Construction Hours. Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays between the hours of 9:00 a.m. and 4:00 p.m., excluding the following holidays:</p> <p>New Year's Day January 1st*</p> <p>Martin Luther King's Birthday 3rd Monday in January</p> <p>Presidents' Day 3rd Monday in February</p> <p>Memorial Day Last Monday in May</p> <p>Independence Day July 4th*</p> <p>Labor Day 1st Monday in September</p> <p>Thanksgiving Day 4th Thursday in November</p> <p>Following Thanksgiving Day Friday following Thanksgiving Day</p> <p>Christmas Day December 25th*</p> <p>*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday.</p> <p>When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the Chief of Building and Safety to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.</p>	Applicant/ Contractor			

**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
<b>N-3 Construction Equipment Sound Control.</b> All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.	Applicant/ Contractor			
<b>PS-1 Construction Materials Recycling.</b> Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the site.	Applicant/ Contractor			
<b>T-1 Evidence of Adequate Access.</b> Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.	Applicant			
<b>T-2 Construction Traffic.</b> The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.	Applicant/ Contractor			
<b>T-3 Construction Parking.</b> Construction parking and vehicle/equipment/materials storage shall be provided as follows:  1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.  2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.	Applicant/ Contractor			
<b>W-1. Drainage and Water Quality.</b> The project is required to comply with Tier 3 of the Storm Water Management Plan (treatment, rate and volume). The Owner shall submit drainage calculations prepared by a registered civil engineer or licensed architect demonstrating that the new development will comply with the City's Storm Water Management Plan. Project plans for grading, drainage, stormwater facilities and treatment methods, and project development, shall be subject to review and approval by the City Building Division and Public Works	Applicant/ Contractor			



**1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT MST2002-00214**  
**MITIGATION MONITORING AND REPORTING PROGRAM MATRIX**

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MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
<p>Department. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water pollutants (including, but not limited to trash, hydrocarbons, fertilizers, bacteria, etc.), or groundwater pollutants would result from the project.</p> <p>The Owner shall provide an Operations and Maintenance Procedure Plan (describing replacement schedules for pollution absorbing pillows, etc.) for the operation and use of any storm drain surface pollutant interceptors that are provided on the project site. The Plan shall be reviewed and approved consistent with the Storm Water Management Plan BMP Guidance Manual.</p>				
<p><b>W-2 Storm Water Pollution Control and Drainage Systems Maintenance.</b> Owner shall maintain the drainage system and storm water pollution control devices in a functioning state. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Coastal Development Permit is required to authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.</p>	Applicant/ Contractor			

## **Appendix F**

### **URBEMIS Worksheets**



Urbemis 2007 Version 9.2.4  
Combined Annual Emissions Reports (Tons/Year)

## File Name:

Project Name: El Camino de la Luz

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.10	0.65	0.29	0.00	0.00	0.03	0.03	0.00	0.03	0.03	70.13

## AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.00	0.02	0.00	0.00	0.00	3.55

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.01	0.02	0.13	0.00	0.02	0.00	9.42

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.03	0.02	0.15	0.00	0.02	0.00	12.97

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Urbemis 2007 Version 9.2.4  
Combined Summer Emissions Reports (Pounds/Day)

## File Name:

Project Name: El Camino de la Luz

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	8.68	9.66	4.21	0.00	0.60	0.48	0.84	0.13	0.44	0.44	1,040.38

## AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.07	0.01	0.05	0.00	0.00	0.00	16.07

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.06	0.08	0.70	0.00	0.10	0.02	52.55

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.13	0.09	0.75	0.00	0.10	0.02	68.62

## Construction Unmitigated Detail Report:

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## CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 5/1/2012-5/8/2012 Active Days: 6	0.43	2.74	2.26	0.00	0.60	0.24	0.84	0.13	0.22	0.35	307.86
Fine Grading 05/01/2012-05/08/2012	0.43	2.74	2.26	0.00	0.60	0.24	0.84	0.13	0.22	0.35	307.86
Fine Grading Dust	0.00	0.00	0.00	0.00	0.60	0.00	0.60	0.13	0.00	0.13	0.00
Fine Grading Off Road Diesel	0.42	2.72	1.97	0.00	0.00	0.24	0.24	0.00	0.22	0.22	286.53
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.01	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.33
Time Slice 5/9/2012-11/9/2012 Active Days: 133	1.12	9.66	4.21	0.00	0.00	0.48	0.48	0.00	0.44	0.44	1,040.38
Building 05/09/2012-11/09/2012	1.12	9.66	4.21	0.00	0.00	0.48	0.48	0.00	0.44	0.44	1,040.38
Building Off Road Diesel	1.11	9.64	4.03	0.00	0.00	0.48	0.48	0.00	0.44	0.44	1,025.30
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.79
Building Worker Trips	0.01	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.29
Time Slice 11/12/2012-11/19/2012 Active Days: 6	8.68	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.64
Coating 11/12/2012-11/19/2012	8.68	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.64
Architectural Coating	8.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.64

## Phase Assumptions

Phase: Fine Grading 5/1/2012 - 5/8/2012 - Default Fine Site Grading Description

Total Acres Disturbed: 0.12

Maximum Daily Acreage Disturbed: 0.03

Fugitive Dust Level of Detail: Default

20 lbs per acre-day



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On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Paving 11/10/2012 - 11/11/2012 - Default Paving Description

Acres to be Paved: 0.03

Off-Road Equipment:

1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 5/9/2012 - 11/9/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 8 hours per day

1 Other Material Handling Equipment (191 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 11/12/2012 - 11/19/2012 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	16.00
Hearth - No Summer Emissions							
Landscape	0.01	0.00	0.04	0.00	0.00	0.00	0.07
Consumer Products	0.05						
Architectural Coatings	0.01						
TOTALS (lbs/day, unmitigated)	0.07	0.01	0.05	0.00	0.00	0.00	16.07

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM25	CO2
Single family housing	0.06	0.08	0.70	0.00	0.10	0.02	52.55
TOTALS (lbs/day, unmitigated)	0.06	0.08	0.70	0.00	0.10	0.02	52.55

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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## Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	0.12	7.95 dwelling units		1.00	7.95	57.72
					7.95	57.72

## Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.3	0.9	98.7	0.4
Light Truck < 3750 lbs	16.6	1.8	95.2	3.0
Light Truck 3751-5750 lbs	20.4	0.5	99.5	0.0
Med Truck 5751-8500 lbs	7.5	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	33.3	66.7
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.7	56.8	43.2	0.0
School Bus	0.2	0.0	0.0	100.0
Motor Home	1.2	0.0	91.7	8.3

## Travel Conditions

	Home-Work	Residential	Home-Shop	Home-Other	Commute	Commercial
Urban Trip Length (miles)	9.9		5.6	6.1	5.7	4.1
						Customer
						5.7

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## Travel Conditions

	Home-Work	Residential	Home-Shop	Home-Other	Commute	Commercial
Rural Trip Length (miles)	15.0		15.0	15.0	15.0	10.0
Trip speeds (mph)	35.0		35.0	35.0	35.0	35.0
% of Trips - Residential	32.9		18.0	49.1		

% of Trips - Commercial (by land use)